# General Engineering Alumni Newsletter 

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## Major Changes in Control Engineering Education the Theme of Recent NSF Workshop

The time is ripe for major changes in the way control theory and control systems technology are taught in the university environment. These changes are necessitated by rapid advances in communications and computer


Arthur Sanderson, director of the Division of Electrical and Communications Systems at NSF, spoke at the workshop.
technology, sensors, and actuators and by the changing needs of industry and the changing backgrounds of students. This and similar topics were the focus of discussion at the Workshop on New Directions in Control Engineering Education, which was held at UIUC on October 2 and 3,1998, in the Coordinated Science Laboratory. Supported by a $\$ 35,000$ NSF grant to Professor Mark Spong and cosponsored by the IEEE Control Systems Society, the workshop brought to Urbana more than 40 key figures in control theory and
control education from around the world, together with more than 20 UIUC faculty members, undergraduates, and graduate students with interests in control systems.

The primary purpose of the workshop was to identify new directions in control engineering education and to recommend new NSF initiatives that could support these directions. The workshop was organized by Spong to address control education in its widest context, including control theory, control applications and practice in various disciplines, control technologies, integration of systems and control concepts, the role of control in design. Five main areas of educational change were emphasized:

- educational content and new organization of control subject matter, including fundamentals, technology and control hardware, applications;
- emphasis on importance of control laboratories and handson control experiences;
- emphasis on control projects and learning through teams;
- impact of computing technologies, including new Web-based educational initiatives;


## General Engineering Is Home to William H . Severns Chair in Human Behavior

The Department of General Engineering is pleased to announce that Ray Price has joined the faculty as the holder of the Severns Chair in the College of Engineering. The William H . Severns Chair in Human Behavior was made possible by an endowment from Robert L. Severns, BSME ' 49 , in memory of his father, who served the university with distinction as a professor of
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## Back to the Future

Hello, alumni and friends of the Department of General Engineering! It will soon be one year since I became the new head of the department. I have received a lot of help in getting up-to-speed from Tom Conry, Tom Prickett, and Jerry Dobrovolny. There is still a lot for me to absorb, but I have learned a few things that I want to share with you.

First of all, it is clear to me that the General Engineering faculty members are dedicated to delivering an outstanding undergraduate engineering program. Secondly, I am im-


Harry Cook pressed with the outstanding qualities of our new faculty and staff members (introduced to you elsewhere in this newsletter). I am confident that we will continue to deliver what our students need in terms of an engineering education. Lastly, I have learned how much it costs to recruit new faculty today in terms of the start-up package for research equipment, summer salary, and student support. When you go for the very best-as we have in GE-you are competing with the very best universities to get them, and the start-up package is now a big factor.

When I was doing my due-diligence to see if I wanted to walk away from a comfortable professorship into the hot-seat of administering budgets, promotions, salaries, tenure, sabbaticals, and malfunctioning air conditioners, I asked Jerry if he would have lunch with me to talk about the GE job in particular. He said "sure" but would I read A History of the Department of General Engineering before we got together. I thought that was a great idea, got a copy, and read through it.

The history is rich, and one thing in particular that I discovered in the reading was that the curriculum for the department approved by the Board of Trustees in 1921 was to provide "a fundamental engineering training with moderate emphasis on design and with stress given to the business side of engineering and industry through sequence of courses in economics, money, and banking, labor problems, etc." This immediately grabbed my attention because my own research for the last eight years had been focused on the business side of engineering.

I am absolutely convinced that such a curriculum is more important now than ever, because our graduates are immersed in an intensely competitive business environment rich in both opportunities and risks. Ultimately, all engineering decisions are business decisions. So my vision for the department can be interpreted as "Back to the Future!"

I am sharing this vision with the faculty and listening in return to their visions and seeing how we can weave them together. Many engineering faculty, with justification, feel that much of what is considered the "business side of engineering" is soft (without rigor). My view is that we need to show others how to do the business side right. Jack Welch, General Electric's chairman, understands that rigorous tools such as design of experiments and statistical process control, if applied throughout his company, will make a big improvement in bottom line. It is also not a matter of asking faculty members to change their research interests but to understand how the technologies they are already advancing impact business through improvements made in quality, lead time, value, and costs. These are fundamental metrics that drive the bottom line.

We will need to form some tighter links to faculty members in Commerce because I see that some of our students will want to know about marketing research and finance. The challenge in achieving this vision will be how to do it without sacrificing the technical side of our students' education. I am convinced that we can work it out as the faculty come to share this vision.

I would be delighted to get your comments by mail, phone, or email regarding the "vision thing" and any other matter concerning the department. Please feel free to share your opinions and suggeslions. Our fax number is 217-2445705 if that is more convenient than traditional mail.


Harry E. Cook

## 1998-99 Pi Kappa Phi National Fellowship Recipient

Sarah A. Beckman '98 has been named the Slater Fellow for Pi Kappa Phi. Dr. James R. Slater, for whom the fellowship is named, was the first member of Pi Kappa Phi to make a contribution to have a fellowship bear his name. There are only 50 national Pi Kappa Phi fellowships awarded each year, and each carries a stipend of up to $\$ 7,000$.

## A Message from Tom Cony

I stepped down as head of the department in May and have been ably succeeded by Professor Harry Cook. I have every confidence that Professor Cook will provide the leadership to expand the department's programs and to raise their quality to the next level.

During my 11 years as head of the department, we embarked on a journey of transition from a faculty that was focused primarily on the undergraduate program to a faculty engaged in research and in graduate as well as undergraduate education. We are still working towards the goal of offering a PhD program, and I believe it is a goal that can be reached within the next $3-5$ years. Our undergraduate program is very strong, and our objective is to continue to strengthen the quality and focus the intellectual direction of our graduate program.

My plans are to return to research and teaching. This year I will be on a sabbatical leave of absence from the university and will spend a significant portion of my time with Caterpillar, Inc. in Peoria. Through a strategic partnership program that Caterpillar has with the university, we found a project of mutual interest that met their needs and my goals for my sabbatical. I will work on tribology problems of scuffing and galling, with a focus on studying the material behavior near the surface during the time leading up to these failures.

I thoroughly enjoyed my tenure as department head. About $1,200 \mathrm{BS}$ students and 160 MS students graduated during this period. I got to meet many alumni who graduated before I started at the university in 1971 and was reacquainted with many who have graduated since then. We have a great department and great students who will soon take their place in the ranks of our alumni. I am proud to have had the responsibility for leading the department and now it is time to get back to the real job of being a professor.

Keep in touch. I would enjoy hearing from you.
Sincerely,


Tom Cory
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- initiatives for K -12 education in control-related subjects (primarily at secondary levels) and new initiatives on continuing education (post BS levels).

Some highlights of the workshop included an opening address by Professor Karl Astrom of the Lund Institute of Technology, Lund, Sweden, who spoke about "Real and Virtual Laboratory Processes," an entertaining multimedia presentation by Professor Burks Oakley of the Sloan Center for Asynchronous Learning at UIUC on "The Internet and Engineering Education: Silicon and Fiber Replacing Bricks and Mortar."

The workshop also showcased the College of Engineering Control Laboratory Network at UIUC, which collectively forms the finest controls laboratories in the country (we're not modest) and which has become a model for laboratory instruction nationwide. Our collegewide network of laboratories includes the Mechatronics Lab and Robotics and Automation Lab, both in the Transportation Building, the college Controls Lab in Everitt Lab, and the Fluid Power Lab in the Mechanical Engineering Lab.

Elevating laboratory instruction to the college level, as we have done, eliminates duplication and allows for horizontal and vertical integration of control education across the curricula of all departments in the college. A number of laboratory tours and demonstrations were given by students, among whom were several current and former GE students: Dan Block, Rex Wagner, Kenda Lynch, Patrick McDermott, and Steve Kuo.

Complete information about the workshop can be found at http://robot0.ge.uiuc.edu/ ~spong/worshop/.
mechanical engineering. The holder of the chair has an appointment in one or more departments of the College of Engineering and will engage in activities important to the undergraduate and graduate educational mission of the college. The purpose of this position is to

- provide assistance to engineering students in the development of their leadership, teamwork, and interpersonal skills,
- provide undergraduate and graduate engineering students with an understanding of human relationships and the importance of these relationships in successfully managing, directing, organizing, and evaluating technical and business endeavors,
- create opportunities for engineering students to be exposed to the reality of human diversity and its impact on the operation of a business entity or other organization,


Raymond L. Price

- provide understanding of how people who approach problems in a variety of ways can be motivated to perform successfully within groups and create innovative solutions to problems requiring acceptance and implementation of new ideas, and
- demonstrate ways to improve economic productivity through improved understanding in human behavior.

Ray Price, with 19 years of experience, is recognized for his proficiency in using education, training, and management development to achieve desired strategic business results associated with major organizational change. His most recent position was with Allergan of Irvine, California, where he was vice president of human resources for the North America region. Before that, he was vice president of human resources development for Boeing Commercial Airplane Group, Seattle, Washington, providing leadership, consulting, and prob-lem-solving support to enhance organizational effectiveness, efficiency, and productivity for an organization with 6,000 employees. He has also worked with HewlettPackard in Palo Alto, California.

Price graduated magna cum laude with a BS in psychology and an MA in organizational behavior from Brigham Young University. He completed his Ph.D. in organizational behavior from Stanford Graduate School of Business. In addition to the primary responsibilities established for the Severns Chair, he is also interested in engineering project management, fast-lime-to-market, and the intersection of technical and business strategies. His office is located in 104b Transportation Building.

## From the Coordinator of Alumni and Student Relations

Hello! I am very excited to have joined the Department of General Engineering in August as coordinator of alumni and student relations. I feel fortunate to have stepped into a position that had been maintained so well by Maureen Krauss. It is a pleasure to have a strong foundation to build upon, thanks to her leadership. It was great to start this job in the fall because I have had many opportunities to meet alumni at the Fall Chicago Area Alumni Reception, Engineering Tent Party, and while many of you have been on campus for recruiting presentations.

First of all, I want to remind you that as alumni relations coordinator, I consider myself to be a "friend raiser" (a term borrowed from Purdue's alumni Web site). While I do serve as our liaison with the College of Engineering Development Office and the UI Foundation and I look forward to new opportunities for individual and corporate giving, there are others in that primary role. Renee Mullen is our development officer. If you haven't had a chance to meet her, I hope you do some time soon. She is a great help to us, traveling the country and applying her talent and professionalism as she works with our alumni to assist them in giving back to our department in ways that best fit their interests and needs.

As our lead "friend raiser," one of my goals is to expand, enrich, and enhance our alumni programming. I want to maintain and build upon current activities (for example, receptions, the Mentor Program) and explore new opportunities for our Alumni Constituent Board. Because I am also
responsible for student relations, I am involved in further developing a strong undergraduate support and communication structure to encourage a lifelong connection with our department and the university. We are fortunate to be a department with a feeling of community and a reputation for the personal attention that we offer our students. I believe we need to maximize our potential and build upon that. I want to positively impact the undergraduate experience so that graduating seniors are highly motivated to join the ranks of active alumni. Did you know that $20 \%$ of your Alumni Association dues come directly back to the department to support our alumni programming? Is your membership current? If not, please use the form in this newsletter to bring your Alumni Association membership up to date.

I am a co-instructor for GE 291 and TQE (Total Quality Education), both of which offer a number of opportunities to bring in to the classroom alumni and industry representatives to address real world issues. I am interested in maximizing our use of the expertise of our alumni and want to bring in alumni as often as possible to make connections with current undergraduates. When undergraduates have a chance to hear and get to know our alumni, it plants the seed for them that, a few years down the road, they too will want to participate as an active alumni. If you would be interested in making presentations to either of these classes on some real world issues, please let me know.

Another part of my job is marketing, recruitment, and

retention. I am developing a plan with some innovative tools for promoting the unique aspects of general engineering. For example, I hope to have a new GE alumni Web site up and running in spring '99 and establish an email communication network to strengthen alumni information dissemination and announcements. We can be linked to the UI Alumni Association Web site, so you can look up friends and find out where they are and what they are doing (if they have released this information to the Alumni Association.)

Those are just a few ideas that I have for the next year. During this first semester, I have tried to get a solid foundation of knowledge and maintain continuity. I see this next year as one that is dynamic, constructive, and collaborative. I would love to hear your opinions, comments, and suggestions. Please use the Alumni Update Form found in this newsletter to let me know what you are thinking or email me at m-dimit@uiuc.edu. Please know that all alumni have a standing invitation to stop in to 209b Transportation Building to say hello and chat if you are on campus.

## New People in General Engineering

When you are on campus and in the Transportation Building, be sure to stop by and say hello to these new members of the GE department.

Narayan R. Aluru joined the department as an assistant professor in January 1998. He obtained a BE (Hons.) degree from the Birla Institute of Technology and Science (BITS), India, in 1989, an MS degree from Rensselaer Polytechnic Institute in 1991 and a PhD degree from Stanford University in 1995. He was a postdoctoral associate in the Department of Electrical Engineering and Computer Science at Massachusetts Institute of Technology from July 1995 to December 1997.

His primary research interests lie in computational analysis and design of microelectromechanical systems (MEMS) and computational electronics. His research includes the development of efficient finite-element, accelerated bound-ary-element and new numerical methods for microscale phenomena in solids and fluids, and parallel computing for engineering applications involving mechanical and electrical domains. He is a member of American Society of Mechanical Engineers (ASME) and Society for Industrial and Applied Mathernatics (SIAM).


Francesco Bullo assistant professor, joined the department in fall 1998. He received the "Laurea" degree magna cum laude in electrical engineering from the University of Padova, Italy, in June 1994, and completed his PhD in control and dynamical systems from the California Institute of Technology in summer 1998. He is also a research assistant professor with the Coordinated Science Laboratory.

Bullo's current research focuses on geometric nonlinear control of smooth and hybrid Lagrangian systems. Application areas include motion planning for autonomous vehicles in aerospace and underwater environments, analysis and design of locomotion mechanisms via impacts and nonholonomic constraints, and controllability theory for dynamical systems with reduced control authority. Preprints are available at www.staff.uiuc.edu-bullo/papers.

Harry E. Cook was a professor in the Department of Mechanical and Industrial Engineering for 12 years before becoming head of General Engineering in 1998. He received his BS degree in 1960 and MS degree in 1963, both in metaliurgy from Case Institute of Technology, and his PhD from Northwestern University in 1966. He then spent a year at the University of Paris as a National Science Foundation postdoctoral fellow. His research involves the business side of engineering, focusing on the broad aspects of product management, product decision making, value analysis, design and analysis of strategic experiments, and advanced quality systems. He has published more than 40 research papers. His 1997 book, Product Management, is based largely upon the findings of his research group at the University of Illinois. The research has been sponsored by Ford, Caterpillar, Deere \& Co., General Motors, General Electric, and the Grayce Wicall and C. J. Gauthier endowments.

Cook's career has embraced both academia and industry. He spent 17 years at Ford and Chrysler in a variety of research, engineering, and management
positions. He initiated the discussions that led to the development of the first cooperative research partnership within the U.S.-based automotive industry-the formation of a precompetitive research joint venture among Ford, GM, and Chrysler for polymer-based, structural composites. He is a member of the National Academy of Engineering, a fellow of the Society of Automotive Engineers, and a fellow of the American Society of Metals. Cook serves on the National Research Council (NRC) Standing Committee, which reviews the research program of the Partnership for a New Generation of Vehicles and is chair of the NRC committee that reviews the manufacturing division of the National Institute of Science and Technology. He was a member of the National Materials Advisory Board from 1993-1996.

Angle Dimil is the new coordinator of alumni and student relations. She grew up in Tuscola, Illinois, and resides in Urbana with her husband, John, and two sons, John (8) and Jordan (7). She graduated from UIUC with a BS in business administration, with a concentration in marketing, and an EdM in human resources education/ vocational and technical education. She comes to GE with 11 years experience in the UIUC Office of Admissions and Records and the Campus Visitors Center. Before that, she worked with the Boy Scouts of America local office and national headquarters specializing in special event planning, program and membership management, and volunteer/board relations. Dimit has 15 years consulting experience in the area of organizational communication, specializing in interpersonal effectiveness, team building, and leadership. Her volunteer activities include the

Board of Sorority Affairs, UIUC, and province collegiate director for her sorority overseeing four university chapters in Illinois. She is an active PTA member, a Cub Scout volunteer, and a Sunday school/vacation bible school teacher.

Most of her time outside the office is spent with her sons, who are active in soccer, tae kwon do, and Cub Scouts. Her office is located in 209b Transportation Building. All alumni have a standing invitation to stop in and visit.

Randy Elkins is assistant to the head of the Department of General Engineering and has been on staff for about six months. He and his family-wife Nancy, and sons Mitchell and Matthew-reside in Fisher, a small farming community in northern Champaign county, where Randy was born and raised. Randy graduated from Fisher High School, which is home to one of the most feared school mascots in the area, the Fisher Bunnies. As Randy says, "That's right, Bunnies! The folklore surrounding the name is as interesting as the name, but since space is limited, I'm afraid you will just have to use your imagination." Randy has a BS in finance from UIUC and worked in the private sector before accepting his current position with GE.

When not coaching Little League, youth soccer, and basketball, he enjoys fishing, boating, bicycling, and just spending time with his family and friends. He also enjoys following the ongoing struggle of the Fighting Illini teams and the other area favorites, the Cubs, Cardinals, Bears, Colts, and the Rams. "Come to think of it, maybe enjoy isn't the right word, endure is more like it. Oh well, there's always next year."

As to how Randy feels about being a part of GE: "My first six months in the GE department have been a great experience. The
faculty, staff, and students here are some of the friendliest and most helpful people I've ever met, and I'm proud to be a part of this fine department."

Amanda Hinkle is a secretary III in the main office for GE. She resides in Champaign after growing up in Cissna Park, Illinois, a small community of 800 people. She graduated with honors in $31 / 2$ years from the UIUC with a BS in business administration, with a concentration in marketing. As a student, she was involved in the Pennsylvania Avenue Residence Halls as fire marshall and treasurer and was a member of the Hall Council. She enjoyed intramural football and tae kwon do and was on the Illini Union Concerts Committee. Since graduation, she has worked for the Department of Statistics, Office of Admissions and Records, and Personnel Services. Her primary duties with GE are to assist the department and faculty in the administration and management of department, college, and university projects. This position is specifically responsible for the Summary of Engineering Research, biographical data forms, coordination of the World Wide Web, physical equipment inventory, key inventory, database development, and maintenance. She enjoys movies and is looking forward to working in GE long term.

Raymond L. Price, professor and Severns Chair for Human Behavior, joined the faculty in the fall semester 1998. He graduated from Brigham Young University with a BS degree in psychology and a MA degree in organizational behavior and earned a PhD degree in organizational behavior from the Stanford Graduate School of Business. He has had a long career in industry working in management and organization development and human resources. Most recently he was vice president of human resources at Allergan, Inc., and before that, director of employee training and development for Boeing Commercial Airplane Group. He had held various management positions with Hewlett-Packard, including manager of engineering education. His primary charter is to provide opportunities for engineering students to understand and develop skills in human behavior: interpersonal, leadership, and management skills that will be useful to them in their careers. He is also interested in engineering project management, fast time-tomarket, and the intersection of technical and business strategies.

## Society of Women Engineers Honors GE Reciplents

The Department of General Engineering is proud to announce that four outstanding undergraduate students were honored at the 1998 Women in Engineering Scholarship Awards Banquet, sponsored by Cargill. The Distinguished Scholar Award was given through the Husseman Memorial Fund to Chelsea Cunningham, Marni Guerra, and Alison Litowsky. Kelly Duddy received a corporate scholarship from General Motors Corp.

## 1997-98 Awards

Once again, this past year the Department of General Engineering was proud to honor outstanding students with the following awards. We look forward to maintaining and building this level of scholarship support for our students in both the undergraduate and graduate programs. The significant generosity of our alumni stands out among the rest, and these awards directly affect the recruitment and retention efforts of the department. If you are interested in creating a scholarship or investigating ways that you can participate in supporting and honoring students, please call or email Angie Dimit, coordinator of alumni and student relations, at 217 -333-0140 or m-dimit@uiuc.edu.

Edward S. Fraser Award: presented to the outstanding senior in general engineering
Amanda M. Veihman, Riverton
Jerry S. Dobrovolny Award: presented to a general engineering senior who has demonstrated outstanding leadership qualities and academic scholarship

Chagit Steiner, Champaign
Randolph P. Hoelscher Award: presented to the junior in general engineering who has achieved exceptional scholarship, leadership, and cultural breadth

Bradley P. Sutton, Bethalto
Herbert J. Sprengel Award: presented for the best design project by a junior in general engineering
Phillip Michael McCratic, Oakwood

## William A. Chiltenden Award:

presented to an outstanding master of science graduate in general engineering
William Robert Norris, Urbana


Bernt O. Larsen Awards: to recognize outstanding excellence in development of a creative solution for a complex, original engineering problem
First Place
Dennis Frantsve, Park Ridge James Haran, Chicago Jonathan Jewell, Belleville

Project: Partition Assembly Process Improvement, Spring 1997 Sponsor: InnerPac, Inc. Faculty Advisor: Professor Yong Se Kim

## Second Place

Romano Floreani, Park Ridge
James Fron, Chicago
Paul Wieshuber, Park Ridge Project: Piston Pin Weight Reduction, Spring 1997 Sponsor: Cummins Engine Co. Faculty Advisor: Professor Edward Kuznetsov

Gamma Epsilon Excellence in Teaching Award: to recognize excellence in undergraduate instruction

Professor Scott Burns

Mildred Mattux and Lisle Abbott Rose Scholarship in General Engineering: presented to two juniors
in general engineering based upon
outstanding academic
accomplishment, extrocurricular activities, and cultural breadth
Scott Horenziak, Frankfort, and John Gutzmer, Kankakee

Robert Jeweit Award: presented to a junior in general engineering with outstanding leadership qualities
Christa Fuhrhop, Salem
Dorothy B. and Donald W. White Scholarship: presented to two students in general engineering with a secondary field in construction engineering or nondestructive testing
Elizabeth A. Rosiello, Palos
Heights, and David William
Schultz, McHenry
Alumni Awards for General Engineering Students: presented every other year to an outstanding general engineering student
Kennda Lian Lynch, Haverhill, Mass.
General Engineering Scholar Awards: awarded solely on academic merit
Freshmen (awarded in sophomore year and renewable for junior and senior years)
Michael Grussing, Penfield
Michael Maschek, Downers Grove
Douglas King, Palos Park
Andrew Loulousis, Brookfield
Anna Para, St. Charles
Jeffrey Legner, Downs
Allen Demling, Glen Ellyn
Sophomores (awarded in junior year and renewable for senior year)
Laura Albert, Schaumburg
Lindsay Krussow, Hawthorn Woods
Jonathan Jacobs, McHenry
Nissa Ali, Lombard
Daniel Feuser, Elgin
Juniors (awarded in senior year)
Benjamin Taylor, Minooka
Bradley Sutton, Bethalto
Adam Laud, Mundelein
Algis Baliunas, Chicago
Karen Kowalski, Wilmington
Gregory Laudermilch, Menlo Park
Bronze Tablet Recipients for 1998
Sarah Beckman
Amanda Veihman

## An Update on the Graduate Program

Professor Henrique Reis has assumed the responsibilities of chief graduate adviser. He also chairs the Graduate Policy Committee, which has initiated an aggressive graduate student recruitment campaign. Some of these new initiatives include a fall and spring reception for our juniors and seniors. We want to introduce them to individual research areas and encourage them to pursue graduate study in GE. For external recruiting, an informational poster and brochure have been developed. In November, Reis and Harry Cook traveled to Rose Hulman to make a presentation to prospective students.

With the current prosperous times for U.S. industry, universities have found it increasingly more difficult to recruit graduate students from around the country. To meet this challenge, the Graduate Policy Committee has developed recruiting strategies and materials to attract the best engineering graduates from institutions of higher education around the nation and the world. This proactive recruitment activity has resulted in a continued increase in the number of graduate students in GE.

The faculty members currently serving on the Graduate Policy Committee are N. R. Aluru, F. Bullo, W. B. Hall, H. Reis, R. Srikant, and D. L. Thurston. The graduate secretary is Amanda Hinkle.

## Faculty News

Scolt Burns was awarded a three-year National Science Foundation (NSF) grant ( $\$ 200,000$ ) for his project "A New Treatment of Nonlinear Structural Analysis and Design," received the American Society of Civil Engineers (ASCE) 1998 State-of-the-Art of Civil Engineering Award for his part in the development of the manual Guide to Structural Optimization, and received the Gamma Epsilon Excellence in Teaching Award for 1998. He recently developed a new senior-level course called "Engineering Design Optimization" that serves as one of the level-3 design electives in the new GE curriculum.

Davld Goldberg attended the American Society for Engineering Education (ASEE) conference in Milwaukee to receive the 1996 Wickenden award for best paper, "Change in Engineering Education: One Myth, Two Scenarios, and Three Foci." He was elected chairman of the International Society of Genetic Algorithms in December 1997 and was selected chairman of the Genetic and Evolutionary Computation Conference), to be held in Orlando, Florida, in July 1999.

His 1997-98 sabbatical leave was divided into two parts. In fall 1997, he spent two months at the University of Dortmund, Germany, working with reknowned evolutionary computation researcher Hans-Paul Schwefel. During his stay, he was awarded the Gambrinus fellowship and gave the annual Gambrinus lecture (last year's lecturer was George McGovern). Then he moved his family to Palo Alto, California, for five months to work with researchers in the Stanford Medical Informatics, Stanford Medical School. He also finished writing a book titled Design of Innovation: Lessons from Genetic Algorithms.

Sandwiched in between these scholarly activities, he ran the Dublin Marathon in Ireland, finishing in 4:07:47 (his second-best time among his three marathons) and ran the largest road race in the world with 70,000 other lunatics (some in costumes, some naked), the famous Bay to Breakers Road Race.

At the 1998 IEEE International Conference on Robotics and Automation in Leuven, Belgium, in May 1998, Mark Spong's video presentation (with graduate student Brad Bishop), "Development of a Three Degree of Freedom Air Hockey Robot," won the conference Best Video Award. Afterward, he took the TGV from Brussels to London through the Channel tunnel and found it quite impressive. Although he hummed the Mission Impossible theme all the way through, nothing out of the ordinary happened.

Spong and Ramavarapu Sreenivas, GE, Seth Hutchinson, ECE, Gerald DeJong, CS, and Karl Rosengren, Kinesiology, have formed an interdisciplinary research group to study human postural control and robot locomotion. They have received a $\$ 500,000$ grant from the NSF Knowledge and Distributed Intelligence initiative titled "Learning Sensorimotor Control of Balance and Locomotion." Spong also received a $\$ 190,000$ grant from NSF to continue his research in nonlinear control of underactuated mechanical systems.

Deborah Thurston reports that at the last Industrial Engineering Research Conference in Banff, Canada, GEs dominated an invited panel discussion on the future of engineering economy. Participating were Angela Locasclo '89 (now at Motorola), Joseph Hartman '92 (now an assistant professor at Lehigh) and Thurston.

## Alumni Sponsor Projects

GE graduates continue to support projects in the senior course, GE 342. In fall 1997, Fred Jewell ('87, MSGE '89), Dan Krueger ('87) and Bill McGrath ('93) from Andersen Consulting in Northbrook continued their sponsorship of a project to provide Web-based tools to facilitate the operation of the College of Engineering Career Services Office. Christy Cienkus ('93) of Spraying Systems in Carol Stream provided a project to automate the measurement of spray impact in two dimensions.

In spring 1998, Dave McGinnis ('82, MSGE '83) of Fermi National Accelerator Lab in Batavia gave us a project to develop a communication system for a robot that roams the tunnel of the particle accelerator. Peter Friddle ('95) of Newell Window Furnishings in Freeport sent in a project to study the feasibility/ optimization of a manufacturing cell.

In the fall 1998 semester, we have three projects from alums. Brian Valley ('98) of Spraying Systems brought us a project to automate the flow calibration of nozzles. Joe Wach ('95) of ITW Produx in Glenview provided a project to predict the performance of motion control devices that his division manufactures. Finally, George Thomas ('83) of Bison Gear and Engineering in St. Charles is sponsoring a project to write software to evaluate gear designs.

Senior projects can be a great way to leverage your efforts or those of your people. The student team can focus on a specific goal for a short period and stay in close communication with you if you are responsive and use the senior project voice mail system. On average, the bang per buck is hard to beat these days. Call Professor Carnahan at 217-333-9623 if you want to get involved. A complete list of projects for the 199798 school year is given below.

Fall 1997
Design and Development of a Web-based Recruitment Information Form
Project Advisor
Company Sponsor
Deborah L. Thurston
Andersen Consulting, Northbrook
Company Contacts
Frederick W. Jewell
Richard C. Coddington, UIUC
Julie McCartney, UIUC
Dishwasher Dry Sensing System
Project Advisor James V. Carnahan
Company Sponsor General Electric Appliances,
Louisville, Ky.
Compary Contacts Ken Davis
Larry Portaro

| Indexable Cutting Tool Tolerancing Analysis |  |
| :--- | :--- |
| Faculty Advisor | Henrique Reis |
| Company Sponsor | Ingersoll Cutting Tool Co., Rockford |
| Company Contacts | Mike Wayman |
|  | Brian Hoefler |


| Seal Design in Four-Port Water Coolant Valve |  |
| :--- | :--- |
| Faculty Advisor | Harry S. Wildblood |
| Company Sponsor | Eaton Corporation, Rochelle |
| Company Contacts | Claude McKibben |
|  | Sandra Lynn Ottomeyer |

Servo Design for Paper Stacker
Project Advisor Rayadurgam Srikant
Company Sponsor InnerPac, Inc., Cicero
Company Contacts Anthony Ditommaso
Chris Woods
Spray Impact Mcasurement System
Project Advisor Harry S. Wildblood
Company Sponsor Spraying Systems, Inc., Carol Stream
Company Contact Christine Cienkus

Torgue Measurement for a Paper Shredder
Project Advisor Mark Strauss/Roland L. Ruhl
Company Sponsor Fellowes Manufacturing, Itasca
Company Contact Bruce Kroger
Redesign of a Truck Camper Mounting Bracket System
Project Advisor Thomas F. Conry
Company Sponsor Atwood Mobile Products, Rockford
Company Contact John Erickson
Water Pump Test Rig Design

| Project Advisor | L. Daniel Metz |
| :--- | :--- |
| Company Sponsor | Cummins Engine Co., Columbus, |
|  | Ind. |
| Company Contacts | Dave Holtz |
|  | Sue Brasmer |

Spring 1998
Analysis of Faceguard/HelmetSystem
Project Advisor W. Brent Hall
Company Sponsor Schutt Manufacturing, Litchfield
Company Contact Ken Nimmons
Cleaning and Testing of Tanks
Project Advisor Harry S. Wildblood
Company Sponsor Morton Metalcraft Co., Morton
Company Contacts Brian Doolittle
Matt Martin


Packnging System Design

| Project Advisor | Deborah Thurston |
| :--- | :--- |
| Company Sponsor | RevereWare Corporation, Clinton |
| Company Contacts | Randy Johnson |
|  | Tim Walls |

Production Process Layout

| Project Advisor | Jeffrey R. Mountain |
| :--- | :--- |
| Company Sponsor | Skyline Design, Inc., Chicago |
| Company Contacts | Charles Rizzo |

Company Contacts Charles Rizzo
Mark Antenora

Racking System Design
Project Advisor Scott A. Burns
Company Sponsor Plastipak Packaging, Champaign
Company Contacts Dennis Nuesmeyer Lori Johnson

Redesign of Puck-Stop Toggle Mechanism
Cost Reduction of Rocker Lever Adjusting Screw for the Signature 600 Engine

| Project Advisor | Edward Kuznetsov |
| :--- | :--- |
| Company Sponsor | Cummins Engine Co., Columbus, Ind. |
| Company Contacts | Kris Baer |
|  | Sue Brasmer |


| Improvement of Debris/Flash Cleaning Operation |  |
| :--- | :--- |
| Project Advisor | James V. Carnahan |
| Company Sponsor | Culligan International, Northbrook |
| Company Contact | Andy Kajpust |

## Inventory System Design

Project Advisor
Company Sponsor
Company Contacts
Ramavarapu Sreenivas
Plastipak Packaging, Champaign
Dennis Nuesmeyer
Lori Johnson
Lenknge Control in a Marine Thermostat
Project Advisor Narayan Aluru
Company Sponsor
Eaton Corporation, Rochelle
Claude McKibben
Chuck Hacker
Lubrication Edaluation for a Rotary Vane Pump
Project Advisor
Mark W. Strauss
Company Sponsor Squire-Cogswell Co., Gurnee
Company Contact
Chris Gossett
Bistable Magnetically Latched Actuator Design
Project Advisor
Juraj V. Medanic
Company Sponsor S\&C Electric, Chicago
Company Contact
Thomas Tobin
Navigation Technology Database Verification Methodology
Project Advisor
Company Sponsor
Company Contacts

Amvarish Goswami
Navigation Technologies, Rosemont
John Jasper
Kevin Cherveny

## Lincoln Arc Welding Awards

The James F. Lincoln Arc Welding Foundation offers annual awards to recognize and reward achievement by engineering and technology students in solving design, engineering, or arc welding fabrication problems. The five criteria used to select the winners are: originality or ingenuity, feasibility, results achieved or expected, engineering competence, and clarity of the presentation.

Since the Department of General Engineering first entered this national competition in 1968, 80 senior design projects have been recognized with this prestigious award. The number of these awards that have been bestowed on GE senior design projects is a testimonial to the high quality of work that can be found through this business-education partnership. Congratulations to all of the winners. Listed below are the awards, titles of the winning projects, student team members, and project advisor in 1997.
Gold
Title of Project: Develop Nondestructive Headspace Measurement Instrument
Team:
Faculty advisor:
Sponsor:

## Sllver

Title of project: Partition Assembly Process Improvement Team:

Faculty advisor:
Sponsor:

## Bronze

Title of project:
Team:
Faculty advisor: Sponsor:

Title of project:
Team:
Faculty advisor:
Sponsor:
Title of project: Donald Morr, Adam Senalik
Henrique Reis
Anheuser-Busch Company, St. Louis, Mo. Dennis Frantsve, James Haran, Jonathan Jewell
Yong Se Kim
InnerPac, Inc., Cicero

Develop Measuring of Rice Polishing Christopher Duffie, Steven Pearce, Christopher Stremlau Harry Wildblood
Anheuser-Busch Company, St. Louis, Mo.
Vibration Isolation for Dishwasher Peter Barajas, Kathy Holian, Fred Retter Juraj Medanic
General Electric Company, Louisville, Ky.
Ergonomic Improvements for Handling/
Packing Lineal Aluminum
Team: Sandra Griner, Mark Landers, Edward Tong
Harry Wildblood
Alumax Extrusions, Inc., West Chicago

## Merit

Title of project: Team:

Faculty advisor:
Sponsor:
Title of project:
Team:
Faculty advisor:
Sponsor:
Title of project: Redesign of Sprinkler in Marine Sanitation System
Neil Kruger, Ernest Manak
James V. Carnahan
Envirovac, Inc., Rockford
Title of project:
Team:
Faculty advisor:
Sponsor:
Title of project: Team:

Faculty advisor:
Sponsor:
Title of project: Team:

Faculty advisor: Sponsor:

Optimize Cam Design on Filling Machine
Nayanna Abrahma, David Kosanke,
Robert Szewczyk
W. Brent Hall

Anheuser-Busch Company, St. Louis, Mo.
Piston Pin Weight Reduction
Romano Floreani, James Fron, Paul Wieshuber
Edward Kuznetsov
Cummins Engine Co., Columbus, Ind.

Team:
Faculty advisor: Sponsor:

Investigation of Rink Wall Padding for Ice Skating
Jonathan Balasa, Keren Hasbani, Eric Rice
Mark Strauss/Roland Ruhl
International Skating Union, Champaign
Pourables Process Optimization
Kevin Hyland, Jeffrey Paris, Nicolas
Psyhogios
Harry S. Wildblood
Kraft Foods, Glenview
Energy Reclamation for a Kiln
Aimee Frake, Jeff Mikulina, David
Rosenberg
Deborah L. Thurston
National Gypsum Co., Waukegan


## Real-World Issues in the Classroom: GE 291 and TQE

GE 291 is a course designed to expose our senior students to realworld issues to better prepare them for entering the workforce. This year's instructors are Angie Dimit, coordinator of alumni and student relations, and Ray Price, holder of the Severns chair. They are working together to offer a strong foundation of knowledge in team building, evaluation, communication, listening, presentation skills, and other basic organizational issues. Alumni are encouraged to be guest speakers to address engineering ethics, the art of negotiation, entrepreneurship, interviews and job hunting, money management, marketing yourself and your ideas, dealing with attorneys, and other topics. For the spring ' 99 semester, we are working on some innovative ideas, including an alumni panel. If you would be interested in speaking to our seniors, please call or email Angie Dimit at 217-333-0140, mdimit@uiuc.edu. GE 291 meets Wednesdays at 12:00 noon.

TQE, Total Quality Education, is a cooperative effort between GE students, faculty members, alumni, and industry that aims to empower GE students to obtain the highest quality education through the formation of teams. The TQE program was developed by Professor David Goldberg. Coinstructors for spring ' 99 are Angie Dimit and Ray Price. This course integrates team skills into the classroom with the team project and also exposes students to project management, presentation skills, communication, and other issues in the workplace. Cornerstones of TQE include the fresh-man-to-senior integration and interaction with alumni and industry. Several corporations


Scott Vifquain and Todd Mitchell, Kurt Salmon \& Assoc., special classroom presentation.
(Ernst \& Young, Andersen Consulting, Kurt Salmon \& Associates, Bechtel Telecommunications) have conducted classroom presentations from their employee training and development programs and have enthusiastically sponsored teams. If you would be interested in supporting TQE by providing speakers or sponsorship, please call or email Angie Dimit. TQE meets Mondays at 12:00 noon.

Special thanks to Michael Brunetto '77 (Anheuser-Busch),

Jeffrey Morris '70 (Telephone Products, Inc.), and Tom Prickett '57 (Thomas A. Prickett \& Associates) for their fall 1998 presentations to GE 291.

Special thanks to Chris Daniel '97 (Ernst \& Young), Dan Krueger '87 (Andersen Consulting), Scott Vifquain '95 (Kurt Salmon \& Associates), and Todd Mitchell '92, MBA '96) (Kurt Salmon \& Associates) for their involvement, support, and participation in fall 1998 TQE.

## New Web Page for Women Engineers

The Society of Women Engineers has created a new Web page especially for all you female engineers out there. This site is designed to help you keep in touch with each other and check out what other engineers are doing. You can visit the site at http://engcouncil.cen.uiuc.edu/soc/swe/AlumniNet and surf around. Don't forget to submit your information using the online submission form so that you too can become a part of our page. Remember, this site is for all alumnae, regardless of whether you were involved in SWE.

## General Engineering Placement System

Dear Alumni,
Each year, the General Engineering Placement System requests the assistance of our GE alumni in finding internship and full-time employment for general engineers. GEPS is back for fall 1998, and once again, we would appreciate any information you could provide regarding the status of hiring at your company. In the competitive job market of today, you can think of GEPS as a means of free advertising. Below is a survey about your company and GE hires. The responses we receive from our survey are distributed to all GE students through a handbook, electronic mail, a bulletin board, and our Web page. Our methods have been so successful that the College of Engineering's Engineering Council recognized GEPS as their "Most Outstanding Society in 1997."

After completing the survey, you may send it traditionally through the mail to the address below, fax it to us at 217-244-5705, or email the information using INENDINO@UIUC.EDU. We thank you for your time and consideration for assisting GEPS with job placement for our GE students, and look forward to working with you.

## GEPS

117 Transportation Bldg.
104 South Mathews Ave.
Urbana, IL. 61801

General Engineering Alumni Name
Year of Graduation
Name of Firm
Check one:

- My firm is currently hiring.

My firm is not actively hiring but will review the résumés of qualified applicants.My firm is not hiring at this time.
Other

## Positions available:

$\square$ Engineering design
$\square$ Technical sales
$\square$ Manufacturing
$\square$ Consulting
$\square$ Other
Summer positions: check one:
$\square$ My firm is hiring engineering students for the summer.
My firm is not hiring engineering students for the summer.
Other
GE 342, Senior Design Course: check all that apply:
I would like to receive an information packet about the Senior Design Course.
$\square$ I would like to receive a call about project sponsorship.
Other
Alumni-student programs: check one:
$\square$ I would like to be involved in the alumni-student mentor program.
I would like to be involved in presentations for GE 291. I would like to be involved in other projects/programs bringing together alumni and students.

## Contact Person for job openings:

Name
Company
Address
Telephone

Fax
Email
Attributes/training that you are seeking for successful engineers in your firm:
$\qquad$

## Dear General Engineering Alums:

Here we are at the end of an exciting year-and at the beginning of an even more exciting new year. As you may be aware, we have a new head of the Department of General Engineering, Harry Cook, and a new coordinator of alumni and student relations, Angie Dimit. Many thanks to Tom Conry, the outgoing head, and to Maureen Krauss, the outgoing coordinator, for their many years of hard work and commendable accomplishments.

I've had several meetings with Harry Cook, and I want to report that this man has the kind of experience as a forward-looking leader we all admire. He has a wide research background in strength of materials, considerable practical experience directly with Ford and Chrysler motor companies, and has a personality that lends itself to solving people problems. I have a great respect for his capabilities and am actively working with him to keep the department in a strong undergraduate position, plus advancing the graduate program in the direction amenable to the modern-day situation so important to the frequent-


Standing: Tom Prickett, Harry Cook, Jerry Dobrovolny, Dick Reynolds. Seated: Carol and Dick Jonson. ly changing industrial climate. Let us all give Dr. Cook a hardy welcome to the position of head of the department and offer our help in any way that we can.

Angela Dimit, our new alumni coordinator, has come on board recently and represents an exciting source of new ideas to further the General Engineering cause. She comes to us from the Office of Admissions and Records, where she specialized in marketing UIUC to future top students around the state. Arranging meetings, creating and organizing brochures, and promoting the cause are just a few of her strengths. The department had excellent final candidates to choose from in filling this position, but Angela Dimit was far ahead of the group. Let us all welcome Angela: she's a real delight to have on the team.

All of us here in Urbana are looking forward to hearing from any of you and learning about your interests and needs. I'll be working at this end to keep my finger on the pulse of the situation here. And don't forget to keep your checks coming whenever you can. Those are appreciated greatly.

To all of our $3,000 \mathrm{GE}$ alumni, I send greetings and report that, in this next year, we are in a terrific position to advance the General Engineering concept and cause. Keep in touch.

Sincerely,


Thomas A. Prickett, P.E.
President of General Engineering Alumni Constituency Board
'41 Herbert Orin Ireland MSCE ' 47 , PhD CE ' 57 has been a retired professor of civil engineering from the University of Illinois since 1979.
'50
Vernon R. Kaufman retired from his position in 1988.
'53 Wendell C. Hildenstein is now living in Florida with his wife of 45 years, Barbara Anderson. He has 7 daughters and 14 grandchildren.
${ }^{\prime} 55$ Wally Faster recently retired from a 33 -year career as marketing director in the Betty Crocker division of General Mills.
'56 Ken Gablin is semiretired in Sun City, Ariz. He
spends his free time growing sweet onions.

Walter Verner recently established a marine surveying and consulting firm, J.C.V. Marine, Inc., in Pensacola, Fla. He has more than 30 years experience in the design, operation, and construction of inland and outgoing vessels and is a certified marine surveyor by the National Association of Marine Surveyors.
'57 Roland Ruble is an assistant dean and director at Rollins College in Winter Park, Florida. He is serving his third year as chairman of the MBA Consortium, an alliance of the top 15 MBA schools in the United States.

Marshall W. Tudor received the 1997 William Winter Award for Outstanding Leadership from UIUC. He and his wife, Ann, have established the Marhsall W. and Ann E. Endowed Scholarships to benefit incoming UIUC freshmen students. He worked at 3M for 35 years before retiring from his position as vice president of the manufacturing resource division.

## GE ALUMNI UPDATES

'59
Jerry Hogan left the Tele-
communications Division of Bechtel Engineering and is now the senior vice-president of Flat Rate Communications in Dallas, Tex.

<br>Thomas A. Prickett is president of Thomas A. Prickett and Associates, Inc.

'62Jeffery H. Roski was appointed president and CEO of LexaLite International Corp. He has had a long career in the plastics industry, including positions with the plastic product operations of American Hospital Supply, Baxter Healthcare, and Bird Medical Technologies, Inc. Before accepting his current position, he headed Harrison Resources, a management consulting firm.


Daniel Gooze is chairman of the board and CEO of $G$ \& M Electrical Contractors in Chicago.

Ronald Kessner received the American Society of Heating, Refrigerating, and AirConditioning Engineers (ASHRAE) Distinguished Service Award in June 1997. He is currently a general manager for Carrier Florida in Ponte Verda, Fla.
Jim Koepke attended the fall ' 98 alumni reception in Chicago. He resides in Naperville and is a senior software consultant for Graphic Technology.

Mike Odell MBA '68, joined Sarah Bush Lincoln Health System in Mattoon in November 1997 and now serves as senior vice president of information systems and as chief information officer. He lives with his wife, Cindy, and daughter, Kristen, in Charleston, where Kristen is a freshman at Eastern Illinois University.

## 1998 Distinguished Alumnus Award

Each year, Gamma Epsilon's award committee selects an alumnus or alumna who has made noteworthy achievements in his/her career and in the field of engineering. The 1998 recipient of this award was Daniel Krueger '87.

Krueger joined Andersen Consulting, a global management and technology consulting organization, in June 1987 and was promoted to manager in September 1991. He works in the Utilities Industry Group's power generation practice, where he focuses on helping utility clients transform their power generation plants into competitive businesses. In January 1998, he was named an associate partner in Andersen Consulting. He resides in Hawthorn Woods with his wife, Joan, and children Lindsay, Daniel, Jr., and Alexander. He currently serves as second vice president of the General Engineering Alumni and Industry Advisory Board. Congratulations to Dan Krueger.

Wondering who has received this award in the past? If you don't have a copy of A History of the Department of General Engineering, here is the list:

## Kenneth W. Hamming ' 40

Barbara C. Johnson '46
Harry E. Hawkins '52
Roy S. Carver ' 34
George S. Trees '37
Arthur G. Dixon '24
Robert W. Rasmus '48
William A. Chittenden '50
Richard L. Hoard '59
Kenneth A. Gablin '56
Gary L. Newtson '57
Bruce R. Holecek '71
John R. Green, Jr. ' 60
Lester A. Boldebuck '50

Chris D. Kacalieff'44<br>Walter W. Foster ' 55<br>Richard D. Jonson '56<br>Jerry S. Dobrovolny ' 43<br>Richard W. Reynolds '53<br>Kathryn Davis '74<br>Leroy E. Kendricks '77<br>Jerry H. Hogan '59<br>Thomas E. Prickett '60<br>Louis J. Mancini '72<br>Paul Rimington '67<br>Nancy Jakse, '74<br>Jeffrey M. Morris '70<br>Daniel P. Krueger '87

## Chicago-Area Fall Alumni Reception

On Friday, August 28, 1998, 30 alumni, faculty members, and staff members gathered at the Chicago O'Hare Hyatt Regency Hotel for the Fall Chicago Area Alumni Reception. The reception was held immediately following the GE 342 informational meeting for potential sponsors.

It was a great opportunity for alumni to meet Harry Cook, our new department head, and Angie Dimit, the new coordinator of alumni and student relations. Illini prizes were given away as well. Look for future alumni receptions. Dates will be in the summer edition of the GE Alumni Newsletter. We are interested in hosting receptions in the St. Louis and Cincinnati areas. Interested? Email Angie Dimit at mdimit@uiuc.edu or call 217-333-0140.

## ISGE News: Fall 1998

The Illinois Society of General Engineers has had an exciting fall semester so far. With the new school year and the new Executive Board working hard, ISGE is looking forward to a fun-filled year.

ISGE has been actively involved in a membership drive. The new Executive Board has been working hard in recruiting freshmen students and new members to become part of the largest society in the department. The first general meeting was a huge success, with one of the greatest turnouts ever seen at a general meeting. Students ranging from freshmen to seniors as well as faculty filled 103 Transportation Building to meet the new Executive Board and to warmly welcome Professor Cook, the new department head. Professor Cook shared his insights on the advantages of a GE degree and the great potential of the GE Department.

There are many exciting events to get you involved with ISGE. The fall picnic sponsored by ISGE and Gamma Epsilon was a great way to start off the year with


From left: Angie and John Dimit, Mary Kay and Prof. Michael Pleck, Carolyn Reed, Donna Eiskamp


From left: Prof. Edward Kuznetsov, Jo Ann Wozniak, Prof. Henrique Reis, Prof. Deborah Thurston students, faculty members, and staff. Plans for plant trips include Anheuser-Busch in St. Louis, Mo., and Mitsubishi in Bloomington. Plans are underway for the annual social events such as the fall camping trip, faculty/student bowling day, and the euchre tournament. Also, a social hour and hockey game is a new event ISGE is very excited about for this semester.
ISGE is involved in the 1999 W. J. "Jerry" Sanders Creative Design Competition, which allows students to demonstrate their technical abilities by building a robot that can maneuver through a path quickly and pick up objects. A demonstration of the final design will take place during the 1999 Engineering Open House and may go on further to compete with other competitive schools. Finally, we are searching for a new logo or phrase to represent our *a* w*e*s*o*m*e* department. ISGE is also holding a t-shirt design contest for the best GE depiction.

ISGE is proud to serve the GE student body and excited about this school year. For more information about ISGE, visit our Web site at : http://stimpy.cen.uiuc.edu/soc/isge/

GE ALUMNI UPDATES
170 Dennis Polhill recently returned from a two-month stay in Moldova, where he helped the country with their effort to privatize.

## 173 Paul Newhagen is a cofounder of Altera Corpora-

 tion, a company concerned with logic integration using programmable devices: he served as director since July 1987 and as vice president of administration since December 1994. Newhagen has also served as secretary, vice president of finance and administration, and as a consultant for the company.
## 174 <br> Mark C. Benton was appointed engineering

 manager at Daniel Woodhead Co.176 Dean E. Anderson is a manager at U.S. Steel in Gary, Ind.

## '77 Dan Donahoe MSME '79, was promoted to senior

 member of the technical staff at Compaq Computer Corporation in December 1996 and senior member of IEEE (Institute of Electrical and Electronics Engineers) in June 1997. He is beginning a three-year term as associate editor of IEEE Transactions of Compontents, Packaging, and Manufacturing Technology.78 Jeffery L. Wellbaum lives in the Atlanta, Ga., area with his wife, Tammie, daughter Emily (12), and son Drew (10). Since graduating, he has worked for Johnson Controls, Inc. His current position is director of business development. In September 1996, he returned to the United States after a two-year assignment in the United Kingdom.

## GE ALUMNI UPDATES

'79Jerry Hagers will be entering his 18th year at Spraying Systems Co. in Wheaton.

Rubin Miramontes, P. E., attended the fall '98 alumni reception in Chicago. He is an engineer in the Department of Aviation for the city of Chicago.

80Brian Galley is employed as a staff environmental engineer for the Plastic Packaging Division of American National Can Company. He is married to Wendy (Hertel) Galley, who is a pharmacist for Walgreens Advanced Care, Neenah, Wisc. They have three boys, Grant (7), Trevor (4), and Jace (1). Even after 17 years in Wisconsin, he is still following the Illini.

Thomas Taylor was promoted to commander while serving with the U.S. Space Command, Peterson Air Force Base, in Colorado Springs, Colo.

> 81 Scott Mason is an engineer with Hewlett-Packard, Loveland, Colo. He was elected to Fort Collins City Council.

In November 1966, William Schaeffer MSCS ' 85 produced his first CD of original piano music, Bill Schaeffer Piano Sole. He works as a digital and 2-D artist for Centropolis Effects in Santa Monica, Calif.


Victor Audo was promoted to assistant general manager of production parts in the procurement department of Mitsubishi Motor Manufacturing of America. Before that, he was manager of production parts, chassis, and powertrain in procurement. After graduating from UIUC, he earned an MBA from the University of Michigan. He is a certified quality engineer, certified reliability engineer, and certified quality auditor and a licensed professional engineer in Michigan.

183
Kathleen (Peters) Issen recently received a master's degree in TAM from Northwestern University and accepted the Murphy Fellowship to pursue a PhD in mechanics. She works as a section manager at Abbott Labs.
Robert A. Plotke is employed at Andersen Consulting in Chicago.

Jamie Ringenbach married Sheila K. Toring on July 5, 1997. The couple resides in Naperville. He works for Bison Gear and Engineering in St. Charles.
Gary Voyda was promoted to branch sales manager for Rockwell Automation in Burr Ridge in May 1997. He lives in Naperville with his wife Karen and their two sons.

Cindy (Moeller) Werbach gave birth to a baby boy, Dustin Ray, on April 24, 1997. She also has a 4-year-old son, Alex. She is a project engineer for Hughes Information Systems in Aurora, Colo.

## ' 84

Joe Kann received a master's degree in manufacturing system engineering from the University of Wisconsin at Madison after he graduated from UIUC. He was just named vice president of global business development of Rockwell Automation. He joined Rockwell Automation's AllenBradley Brand in 1986 and has held increasingly responsible positions since that time.

David L. Lukens was recently promoted to business unit regional technical manager for ABB CE Services, Inc., and transferred from Buenos Aires, Argentina, to his current home in Madrid, Spain. On May 14, 1997, a daughter, Shannon Lynn, was born to David and his wife, Mercedes.

Toni L. Baumann is a senior product specialist for Fluke Corporation in Schaumburg.

Kim Marie (Voss) Schuelke is a packaging design engineer for medical devices and products at

Ethicon Endo-Surgery, a division of Johnson \& Johnson, in Cincinnati, Ohio. She lives with husband Marcus and three daughters.

'85Jeanne Staudacher Fischbach gave birth to twins, Amy Lynn and Jack Conrad, on May 27, 1997. She is a director of operations for Motorola.

John G. Kachoyeanos of Re/Max Realty Associates has been licensed as the first "By Referral Only" consultant in Champaign-Urbana.
Kathleen M. (McGee) Nikolai recently married and moved to Wisconsin. Her new address is 7737 Sixth Avenue, Kenosha, WI 53143.

Paul G. Stewart has been appointed to the newly created position as sales manager for original equipment manufacturers by Johnson Controls and will focus on the specialized OEM customers in North America. He will also manage sales efforts to the smaller heating, ventilating, air conditioning, and refrigeration original manufacturers. He has been with Johnson Controls since 1987.

Douglas Williamson and Michelle Panissisi were married on October 4, 1997. The couple lives in Burlingame, Calif.

## 86

 Spiro J. Deligiannis MSGE ' 91, MBA ' 91 , is an information systems specialist for United Airlines in Chicago.Rob Flanigan MBA '90, lives in Madison, Wisc., with his wife Mona and their daughter Bailey. He worked for the Center for Demand Side Research. In the past three years, he has conducted research to develop a book on financial products and services to provided people with useful techniques for financial planning.
Michael S. Rickey is a senior design engineer for wheel tractor scrapers at Caterpillar , Inc., in Decatur.

${ }^{87}$Mun Young Choi is an assistant professor of mechanical engineering and faculty advisor at the University of Illinois at Chicago. He recently worked with a team of students to design an automobile that was powered with fuel made from corn and other crops.
John Glynn is a technical consultant for Computer Science Corporation.
Frederick Jewell MS '89, attended the fall '98 alumni reception in Chicago. He and Julie Furmanek Jewell BS '87, MS '92, have two children, Madison (4) and Maxwell (1). He is an associate partner and she a senior manager at Andersen Consulting in Chicago.
Dan Krueger attended the fall '98 alumni reception in Chicago. He is an associate partner with Andersen Consulting and resides in Hawthorn Woods. He has three children: Lindsay (6), Danny, Jr. (2), and Alex ( 9 months).

Lisa (Kempf) Maylath earned an MBA from the University of Kansas in 1993. She works for Avery-Dennison Office Products in Milford, Mass., as an operations manager. In August 1997, she married Craig Maylath.
Mary Beth Prickett married Robert C. Burke on August 17, 1996. She works as an account manager for Motorola in Northbrook.

Tony Schaff married Stephanie McKinney in October 1995. He is a senior plant engineer for Alcon Labs in Fort Worth, Tex. The couple recently celebrated the birth of their first child, Anthony Lawrence, Jr.


Sarah Ann Geis married Brian Alan Moore on August 10, 1996. She is employed at Schiff, Hardin, and Waite in Chicago.

Steven John Grosklaus married Anne Margaret Bergin on May 25, 1996. He is a senior analyst in database marketing at Leo Burnett U.S.A

Robert Leland MSGE '88 worked as a structural engineer for The Aerospace Corporation in Los Angeles after graduation. In 1995, he earned an MBA degree from the University of California, Berkeley. He was invited to teach a business class at Tianjin University in China and later opened up a restaurant in downtown Tianjin called the City Slicker Saloon.
A Neenah, Wisc., native, George A. Miller, now resides in Chicago's Lakeview neighborhood with his wife, Jeanne. He joined Andersen Consulting in 1988 and now is an associate partner with the firm. He is an avid supporter of the American Cancer Society.
Alison Robinson works as a superintendent of the maintenance reliability department of Quantum Chemical Company in Morris. She began her career at Quantum in 1995.

Dave Wears graduated from Kellogg Graduate School of Management in June 1996. He now works as a marketing assistant for Kimberly-Clark in Neenah, Wisc., where he lives with his wife Diane (BSEE '89) and sons Philip (5) and Jacob (3).

' 89Ed Cramer started work as a senior mechanical engineer for Crawford, Murphy, and Tilly in Springfield in March 1997. Daughter Stephanie Elise was born in November 1996.

Sharon Mann and Edmond Harrigan were married on October 11, 1997. They live in Evanston.
Brendan Quealy and Elise Ertle were married December 27, 1997. They are residing in Chicago.

'90Stephen Bicking was promoted to consultant drainage studies manager for the Illinois Department of Transportation. He is currently enrolled in the MBA program at Northern Illinois University. He and his wife, Maria, have a son, Patrick Stephen, born January 11, 1997.
Jayne (Lassiter) DeCoste became a licensed professional engineer in civil engineering in July 1997 and was promoted to project manager at Anderson-Boyert Engineers and Surveyors, Inc., in Cedar Rapids, Iowa.

Eric William Gallender law '93, married Robin Suzanne Cooke on July 13, 1996. He is employed with the law firm of Seyfarth, Shaw, Fairweather, and Geraldson.

Dave McDonough is a project engineer for Gelman Sciences in Ann Arbor, Mich.

Ed Lennox BSEE '90, MSGE '92, MSEE '97, expects to earn an MBA from the University of Chicago in 1998.


Mark Buwen attended the fall '98 alumni reception in Chicago. He resides in Chicago and is a federal aid location engineer with the Illinois Department of Transportation.

Brian S. Dalisay has been named manufacturing manager at Bur-gess-Norton Manufacturing Co. at the Muskegon, Mich., plant. The company is a major supplier of cold extruded steel and cast ductile iron parts for a wide range of industrial applications. He joined the company in 1991. He and his wife, Cheryl, are the parents of one daughter and reside in Norton Shores, Mich.
William Barrett Evans MS '94, married Stephanie Ann Roth on May 31, 1997. He is employed as an environmental engineer by Trinity Consultants in Overland

## GE ALUMNI UPDATES

Park, Kans. They live in Prairie Village, Kans.
Ron Gerona is a design engineer of the vehicle operator compartment for CASE Corporation in Burr Ridge.

Elizabeth Hausler earned an MS degree in environmental science from the University of Colorado in 1995 and then worked in the environmental engineering field for the Denver and Seattle offices of Dames and Moore. She is currently completing a one-year MS program in geotechnical engineering in the Department of Civil and Environmental Engineering at the University of California, Berkeley.

## Victoria (McCleary) Hayden

 married Dan Hayden (UIUC '91) and completed a master's degree in urban and regional planning at UIUC. She lives in Chicago and works as an environmental engineer in the air and radiation division of the U.S. Environmental Protection Agency.Daniel Ray Long and Mandy Anne Billeb were married September 27, 1997. The couple resides in Dixon.

Kelly McNichols married John Moore in May 1997. She has worked as a global account manager at MCI for the past eight years.

'92Christine Fiore received a certificate in charge management from DePaul University, Chicago, in May 1997. She recently moved from Chicago, where she was a reliability engineer with CASE Corporation, to the San Francisco area, where she is a project manager at Applied Materials.

Lisa Chandler and Lee Peacock were married on December 31, 1997.

Curtis W. Fisher is a gas engineer for Central Illinois Public Service Company. He is currently enrolled in the MBA program at Eastern Illinois University.
Joseph C. Hartman is an assistant professor of industrial and manufacturing systems at Lehigh University.
Tim Hoffman has been a software engineer for Enterprise Rent-a-Car for three years.
Todd Mitchell works for Kurt Salmon Associates in Princeton, NJ.

Rebecca Stuedebaker and Frederick Marruffo were married on November 8, 1997, and live in Rock Falls.

Jeffrey R. Wales is a U.S. Air Force captain. He has graduated from the joint specialized undergraduate pilot training at Vance Air Force Base, Enid, Okla., and received an aeronautical rating of pilot in the military. He has also received a master's degree from Arizona State University in 1996.

Michael Lee Watson and Stephanie Anne Knight were married November 1, 1997. They are residing in Chicago.

93Christy Cienkus married Anthony Hofherr on September 19, 1997. She works at Spraying Systems Co. in Wheaton.
Nancy Erler works as a cost engineer in the food division of Procter \& Gamble.

Karl Hadler and Edith Beuby were married on November 20, 1997. The couple resides in Pleasant Hill, Calif.
Michael Allan Johnson is working towards a master's degree in civil engineering (soils and foundations) at UIUC. He is a project engineer for Midwest Engineering Services, Inc., in Champaign. He and his wife, Stephanie, have a daughter, Heather.

James Ringenbach and Sheila Toring were married July 5, 1997 They live in Naperville.
Brad Weinshenker married Kathleen Seibert on June 21, 1997 He works as a senior application engineer for Mannesmann/ Rexroth/Indramat in Hoffman Estates. His job includes develo ment of robotics and metalforming controls for use in the industrial automation market, software development and testin hardware testing, machine desig and troubleshooting, and engine ing controls. He says the strong background he got in design engineering and controls from th UIUC GE program helped prepa him for this job.
'94
Grant J. Heliker traveled South America after gradt tion.

Deborah Kala and Jason Moline were married in September 1997 She is pursuing a master's degre in business at Northern Illinois University and works as a marke ing development manager at Automation Equipment Compan in Mount Prospect. He is a plant manager at Armstrong Tool in Chicago.
Donald Moffett MS '96, is a quality engineer at LoDan Electronics in Arlington Heights. He attended the 1998 Fall alumni reception in Chicago.
Kristopher Moldovan recently received his doctorate from the School of Law at Duke Universit He is employed by the firm of Wildman, Harrold, Allen, and Dixon in Chicago, where he concentrates on the corporate, securities, and tax group.
Jason Moline and Deborah Kala were married September 29, 1997 The couple resides in Elk Grove Village.

95Brian R. Buchheit is pursuing a masters in civil engineering (environmental systems) at Southern Illinois University at Edwardsville and is a civil engineer for Henry, Meisenheimer, and Gende, Inc.. in Carlyle. He married Melissa Varel in November 1997.

Mike Burzawa is a product development engineer for Ma-cLean-Fogg Company in Wheeling.
Larry Carpenter has a new address: 2343 Lexington Drive \#101, Mount Prospect, IL 60056. His email address is
lcarp@megsinet.net.
Waymond Eng attended the fall '98 alumni reception in Chicago. He recently relocated to Boston and started with RSA in September 98. He had been with UARCO, Inc. (now called Standard Register) with other GEs Shannon Lloyd '95, Chris Schumacher '94, and Scott Pracko '89.

James Fisher recently traveled to Germany to work on a suspension link project for Ford. He is a product development engineer for MacLean-Fogg Co.
Kendall Lockard married Mary Fayhee on June 21, 1997. He is a design engineer for Atlas Components in Rockford.

Kelly McLain is an R\&D engineer for Eaton Corporation in Carol Stream.

Jennifer Nona was promoted to assistant technical director at Industrial Light and Magic, the special effects company owned by George Lucas, in Marin County, Calif. She is currently working on Star Wars: Episode Ont. She was an extra in The Special Edition of the Return of the Jedi and received a film credit for Jurassic Park: The Lost World.

Dan Smith attended the fall '98 alumni reception in Chicago. He is employed in physical equipment with Lucent Technologies in Naperville. He resides in Elgin.

Ian W. Bruce received his commission as a naval officer after completing officer candidate school in Penascola, Fla. During his 13-week training program, he received training in navigation, ship handling, engineering, naval warfare, and management, underwent strenuous physical activities, and received leadership training and instruction.
W. Ryan Geister and Catherine Orn were married May 23, 1998. He is employed by the Trane Co. in La Crosse, Wisc.
Kenneth T. Horlander graduated from the University of Illinois College of Medicine. He will continue his training as a doctor at Emory University in Atlanta, Ga., and plans to specialize in internal medicine.

Robert Jamison is working in the Washington, D.C., metro area as a systems analyst/trainer.
John Paxton and Julie Martin were married on May 14, 1997. They live in Dallas, Tex.

In January 1997, Jack Pecoraro, Jr., started work as an engineer with the Public Works Department of Springfield.
Ericka Joy (Olson) Southcombe attended the fall '98 alumni reception in Chicago. She married William Southcombe on August 17, 1996, and is a staff engineer with Stilson Consulting, Grayslake. She completed a B.A. at Wheaton College and resides in Palatine.

## 97 Kyle Bowerman got mar-

 ried in December 1997. He lives and works in Bozeman, Mont., where he is a chief technical officer for CRJ Communications. He is working on a design for the city telemanagement plan of Spokane, Wash.Sanjeev Chauhan works for Structural Dynamics Research Company in Milford, Ohio.

James Eric Cribbett married Christina Mollusky on May 24, 1997. He is currently employed with McDonnell Douglas in itsflight control aerospace group in St. Louis, Mo. The couple resides in Florissant, Mo.
Christopher Daniel attended the fall '98 alumni reception in Chicago. He is a management consultant with Ernst \& Young LLP and serves as the company contact for TQE and GEPS Jobapoloosa in G.E. at UIUC.

Jose L. Del Real is working for Northern Illinois Gas. He has been married for one year.
Jonathan Jewell works for Spraying Systems in Palatine.

Steve Pearce is working with Control Solutions, Inc., Chicago, a company that designs and installs control systems for heating, venting, and air conditioning systems as well as access controls and other applications. Ongoing work includes buildings on the campuses of Northeastern University and UIC.
Paul E. Repmann, Jr., works for Texonics, Inc., in Denton, Tex.

Fredd Retter is working at Underwriter's Laboratories, Northbrook, as a project engineer in the Engineering Services Lighting Division.

Charles Earl Rose works for Caterpillar, Inc., in Peoria.
John Smith works for Andersen Consulting in Milwaukee, Wisc.

Dwight T. Todd MSGE '97 is employed as a research engineer II for the Orthopaedics Division of Smith \& Nephew, Inc., in Memphis, Tenn.

'98Jim Buccarossa attended the fall '98 alumni reception in Chicago. He is employed with Ernst \& Young LLP as a consultant.
Christopher Strong was commissioned as second lieutenant through the U.S. Air Force ROTC program.

## In Memoriam

## 26 Corliss Anderson.

131 Carl James Harper, March 88 years old.

136
Edward W. Agner, Jr. He was employed by Lockheed Aircraft-California and later by Lockheed-Georgia and retired in 1975. He was the captain of the polo team and a member of the swimming, gymnastic, and wrestling teams. Preceded in death by his wife, Harriette White, he is survived by two daughters, four grandchildren, and one great grandchild. was married for 55 years. He retired in 1978 from Bethlehem Steel Corp., where he had been a metallurgical engineer in railroad products for 40 years.

Richard B. Clark, February 26, 1998.

Arthur W. Buckner, Jr., November 4, 1996.

## Robert Fagaly, April 4, 1998.

Return Alumni Update Form to Angie Dimit:
fax 217-244-5705
OR 117 Transportation Bldg. 104 South Mathews Avenue Urbana, IL 61801

## Alumni Update Form

Name
Year of graduation
Additional degrees
Current title and position
Company
Business address

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Business fax
Home address

## Home phone

Home fax (if applicable)
email address
Personal news, achievements, honors:

## Please indicate:

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General Engineering Placement Service (for students)
GE 291 and TQE

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College $\qquad$
Department $\qquad$

Year $\qquad$

Joint Member Name $\qquad$
UD14

## Calendar of Events

February 9, 1999
Greater Naples UI Alumni Club hosts Medicare 7, 8, or 9 (call Paula Havlik at 217-333-9141)

February 11, 1999
Sarasota/Manatee UI Alumni Club hosts Medicare 7, 8 or 9 (call Paula Havlik at 217-333-9141)

February 12, 1999
S.W. Florida UI Alumni Club hosts Medicare 7, 8, or 9 (call Paula Havlik at 217-333-9141)

February 13, 1999
Tampa UI Alumni Club hosts Medicare 7, 8, or 9 (call Paula
Havlik at 217-333-9141)
March 2, 1999
UIAA hosts annual Founders Day Celebration at UIUC

March 6, 1999
Rockford UI Alumni Club hosts
Medicare 7, 8, or 9 (call Jayne
DeLuce at 217-333-9228)

May 141999 (subject to change)
Senior Design Project Final
Presentations
Alumni and Industry Advisory Board Meeting

September 4, 1999
Home football game with Arkansas State ("Salute to Labor")

September 11, 1999
Engineering Tent Party, home game
with San Diego State ("Pork Day")
September 15-17, 1999
College of Engineering Advisory
Board Meeting
September 18, 1999
Football game at Louisville
September 23-25, 1999
UI Foundation Annual Meeting
September 25, 1999
Home football game with Michigan
State ("Foundation and Siblings
Weekend")

October 2, 1999
Football game at Indiana
October 16, 1999
Dean's Annual Meeting, Homecoming with Minnesota
October 21 \& 22, 1999
COE Board of Visitors
October 23, 1999
Football game at Michigan
October 30, 1999
Home football game with Penn State ("4-H Day")

November 6, 1999
Football game at Iowa
November 13, 1999
Football game at Ohio State
November 20, 1999
Home football game with Northwestern ("Dad's Day")

The University of Ilinois at Urbana-Champaign is an equal opportunity and affirmative action institution.

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