

GE ALUMNI NEWS

Department of General Engineering

University of Illinois at Urbana -Champaign

See the GE Web
Site for more
information!

A MESSAGE FROM THE DEPARTMENT HEAD



As you know, the GE alumni newsletter was suspended in 2002 as a result of the severe budget cuts that we were facing at that time. While the budget crisis continues to challenge us to cut costs, I have nevertheless decided to reinstate the newsletter as I think it is vitally important to stay connected to you, the GE alumni, especially at a time when so many changes are occurring in the department and around campus. In order to keep our costs as low as possible we are publishing an abbreviated newsletter with the full stories and lots more available on the web version. I encourage you to visit the GE web pages and read the complete newsletter.

It has been my privilege to serve as Interim Head this year following Harry Cook's very successful five year tenure as Head. I would like to thank Harry for his leadership and wish him and Valle continued success and happiness as they embark on the next phase of their lives in their new home in Colorado. The GE Department made important strides under Harry's leadership and I am happy to report that the Department is strong and poised for continued growth. To recognize Harry's contributions to the Department, the GE Alumni Board has created and funded the Harry Cook Seminar Series in Entrepreneurial Engineering, which will bring to campus distinguished speakers in entrepreneurial engineering. I wish to thank Mike Brunetto, the current President of the Alumni Board, and the entire Board for their generosity in establishing this seminar series.

Of course, the biggest change in the GE Department over the past five years was the approval of the M.S. and Ph.D. programs in Systems and Entrepreneurial Engineering. Our first class of graduate students has been admitted into the program and is making good progress. The first Ph.D. qualifying examination will take place in October, 2004. Our first graduate fellowship was established last year through a generous gift from alumni Bill and Carol Chittenden. Recently, the Department received a major bequest from the estate of Frederick Hansen, a 1928 graduate of the Department. From these funds I created two more graduate fellowships, which will be awarded on a yearly basis beginning in the fall of 2004. Our graduate students are also competing successfully for College and University level fellowships, such as the Vodafone and Carver Fellowships. Our total graduate enrollment in both the M.S. and Ph.D. programs is now over 60 students and our graduate program is attracting numerous applications from top students from around the world.

At the same time, our undergraduate program continues to prosper. The GE undergrad enrollment is now fourth largest of the twelve departments in the College of Engineering, just slightly larger than enrollment in Civil Engineering. The job placement rate for GE students is consistently at the top of the College. All of this bodes well for the future of the General Engineering degree programs.

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Department of General Engineering

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Mark Spong

Assoc. Dept. Head
Juraj Medanic
Manssour Moeinzadeh

Professors
Conry, Thomas F.
Cook, Harry E.
Davis, Wayne J.
Goldberg, David E.
Price, Raymond L.
Reis, Henrique
Spong, Mark W.
Thurston, Deborah L.

Associate Professors
Burns, Scott A.
Hall, W. Brent
Sreenivas, Ramavarapu S.
Wozniak, Louis

Assistant Professors
Beck, Carolyn
Bullo Francesco
Yassine, Ali

Adjunct Professors
Carnahan, James V.
Ruhl, Roland L.
Vojak, Bruce A.

Adjunct Assoc. Prof.
Strauss, Mark G.

Lecturers
Leake, James

Adjunct Lecturers
Mottier, Charles H.
Wildblood Harry S.

Academic Professionals
Carmody, Kevin R.
Dimit, M. Angela
Elkins, Randall K.
Hollis, Laura
Wildblood, Harry S.

Staff
Eiskamp, Donna J.
Hilligoss, Debra L.
Hills, Peggy R.
Reed, Carolyn
Tiffin, Holly
Tyler, Brenda

DEPARTMENT HEAD (continued)

Many of you are undoubtedly wondering about the plans to merge the General Engineering and Industrial Engineering programs. The College of Engineering Executive Committee voted 12-1 in favor of a merger, passing a resolution to “form a new department combining elements of industrial and enterprise systems engineering.” The sole negative vote was from the Department of Mechanical and Industrial Engineering. As a result of the Executive Committee vote, Dean Daniel has indicated that he will combine the GE and IE faculty over approximately the next 18 months. A transition committee will be formed to help with the merger process. The new department, whose name has not yet been determined, will be responsible for the current GE and IE degree programs. I will keep you informed of progress as it occurs. In the meantime I encourage all alumni who have questions or concerns to email me at mspong@uiuc.edu or call me at (217)333-4281.

THE FREDERICK AND RACHEL HANSEN FELLOWSHIP FUND IN GENERAL ENGINEERING

It is with deep gratitude that General Engineering announces the Frederick and Rachel Hansen Fellowship Fund. Supported through a very generous bequest from the Hansens, and matching funds from the Provost's Office, the Department has established two \$14,000 graduate fellowships.

Frederick A. Hansen, 95, of Rock Island passed away in 2002. Mr. Hansen attended Augustana Academy, Rock Island, and graduated from Culver (Ind.) Military Academy in 1924. He received his BSGE in 1928.

Mr. Hansen worked as a civil engineer at the Rock Island District, U. S. Army Corps of Engineers, from 1933 until his retirement as chief of the construction branch in 1973. In 1975 he was inducted into the Gallery of Distinguished Civilian Employees of the Rock Island District. Prior to 1933 he worked for Weyerhaeuser Timber Co. Idaho, Oregon and Washington, and for the Illinois Department of Highways. He was a World War II Navy veteran, serving as a lieutenant in ordnance from 1943 to 1946. He was a former member of the Army and Navy reserves.

Mr. Hansen was a former member of the Illinois Society of Professional Engineers, and of the Friendship Manor Board of Trustees for 15 years. He was a member of Rock Island Arsenal Golf Club, a 50-year member of Trio Lodge 57, AF and AM, and a member of The Scottish Rite and Coordinate Bodies, Valley of Moline, and the Kaaba Shrine. He was also a member of the National Association of Retired Federal Employees and the Rock Island County Historical Society, and a member of Broadway Presbyterian Church for over 80 years, serving as an elder, a trustee, and as chairman of the building committee following a disastrous fire of 1947.

He enjoyed traveling, fishing, stamp collecting, and playing golf and bridge.

NEW FACULTY MEMBERS JOIN GENERAL ENGINEERING

Prof. Ali Abbas comes to GE from the Department of Management Science and Engineering at Stanford University. He received a Ph.D. in Management Science and Engineering and had a Ph.D. minor in Electrical Engineering from Stanford in 2003. He also received his M.S. degrees in Electrical Engineering and Engineering Economic Systems and Operations Research from the School of Engineering at Stanford. He has taught decision analysis to Graduate students, Business Executives, high school math teachers, and to high school students. He has also practiced decision analysis with Strategic Decisions group and applied it to several industries including oil and gas, pharmaceuticals, mergers and acquisitions, and electric utility companies. His research interests include decision making with incomplete information and preferences, data-based decision making, medical decision making, and applications of operations research in bioinformatics.



Prof. Connie Borrer was an Assistant Professor of Decision Sciences in the LeBow College of Business at Drexel University. She received a Ph.D. in Industrial Engineering from Arizona State University with an emphasis in Quality and Reliability Engineering. Her areas of research and interests include new advances in experimental design, response surface methodology, measurement systems capability, statistical process control, computer intrusion detection, and other statistical applications in business, engineering, and the sciences. She is a co-author of over thirty journal publications and two textbooks. Dr. Borrer is a member of ASA and ASEE, a Senior Member of ASQ and IIE, and a Chartered Statistician in the Royal Statistical Society.

Prof. Harrison Kim is a research fellow in the Department of Mechanical Engineering at Northwestern University. He also holds a joint appointment at the Automotive Research Center at the University of Michigan. He earned his Ph.D. degree at the University of Michigan in 2001. In 2002 he worked as a senior consultant at Samsung Data System, a leading Business-IT consulting company in Korea in the area of Six Sigma and IT consulting. In 2003 he joined Automotive Research Center at the University of Michigan as a research fellow. His research is focused on multidisciplinary decision making and its application to large-scale system design. Now he is expanding his research in the area of uncertainty and reliability in decision-based system design framework at Northwestern University.



Prof. Rose Mary Cordova-Wentling has joined the GE Department as an Adjunct Professor. Professor Cordova-Wentling is also a Research Scientist at the National Center for Supercomputing Applications (NCSA) at the University of Illinois. She will be teaching primarily in the Human Behavior thrust of the Department. Some of the courses she will be teaching include: Interpersonal Skills and Emotional Intelligence, Leading Sustainable Change, Engaging Leaders, and Gender and Culture in Engineering.

Her major program of research has to do with improving human resource work performance. It focuses on expanding our knowledge base related to how organizations in the future will effectively utilize information technology and human resources to maximize work performance. Within her major program of research there are three areas: the career development of women in management, the effective management of diversity in education and the workplace, and the use of information technology to enhance human performance in the workplace.

Professor Mark Spong invested as Donald Biggar Willett Professor in the College of Engineering



Mark W. Spong was invested as one of five Donald Biggar Willett Professors in Engineering. Prof. Spong is an expert in nonlinear control theory and robotics. He has made fundamental contributions to the control of robot manipulators, teleoperators, and other mechanical systems. He received the B. A. degree magna cum laude in mathematics and physics from Hiram College in 1975, the M.S. degree in mathematics from New Mexico State University in 1977, and the M. S. and D. Sc. Degrees in systems science and mathematics in 1979 and 1981, respectively, from Washington University in St. Louis.

He was a faculty member at Lehigh University and Cornell University prior to joining the University of Illinois in 1984. He has held visiting positions at the National Polytechnic Institute of Mexico, the University of Waterloo, Canada, the Technical University of Compiegne, France, The Lund Institute of Technology, Sweden, the Catholic University of Leuven, Belgium, The National University of Singapore, and the Technical University of Munich, Germany.

He is currently Interim Department Head for General Engineering and President-Elect of the IEEE Control Systems Society. Within the IEEE Control Systems Society he was the Vice President for Publication Activities from 2000 to 2002 and a member of its Board of Governors from 1994 to 2002. He served as Editor-in-Chief of the IEEE Transactions on Control Systems Technology from 1997-2000.

Professor Spong has published more than 150 technical articles in control and robotics and is co-author of two books. He is a Fellow of the IEEE and a member of Phi Beta Kappa. In 1999, he received a Senior Scientist Research Award from the Alexander von Humboldt Foundation, Bonn, Germany. Other honors include the IEEE Third Millennium Medal in 2000, the O. Hugo Schuck

Award from the American Automatic Control Council in 2001, and the Distinguished Member Award from the IEEE Control Systems Society in 2002.

In addition, he is president of Mechatronic Systems, Inc., a company he founded in 1996 to design and market advanced control educational products that are in use at more than 100 universities worldwide.

The Donald Biggar Willett Professorships honor the late Mr. Willett, who attended UIUC from 1916-1922. He left the university six credits short of earning a B.S. from the Dept. of Civil Engineering. After leaving Urbana-Champaign, he joined his family's Chicago-based coal business, Suburban Coal and Supply Company, as a partner.

In the 1930's, Mr. Willett moved to Los Angeles, where he owned a bookkeeping and tax preparation business. He died in 1981 at the age of 83. According to Mrs. Willett, her late husband admired the College of Engineering for its thriftiness and honesty and, therefore, left a bequest in his memory upon her death in 1993. As stated in her will, the gift was "for research, in memory of my beloved husband." The purpose of the Willett Professorships is to increase the distinction of the College and its departments by recognizing and stimulating intellectual leadership and outstanding research.



Top:
Associate
Dean, Roscoe
Pershing and
Mark Spong.

Left Mark
shares a few
remarks.

Tom Prickett receives Alumni Award for Distinguished Service from College of Engineering



Dean David Daniel (L) presents the COE Alumni Award to Tom Prickett.

Tom Prickett, BSGE 1960, was honored at the College of Engineering Awards Convocation for his contributions to and applications of knowledge, entrepreneurship, and creativity, fostering the development of young people, and exceptional service to the Department of General Engineering.

Tom has over 42 years of worldwide experience in groundwater research, aquifer evaluation, well-field development and design, mining impact analysis, mass transport problem and process investigations, computer modeling, conducting modeling seminars, and litigation as an expert witness. He was one of the first to recognize the importance of the digital computer on the analysis of groundwater problems and developed several of the first groundwater models in the industry.

He established his own consulting business in 1981 and has established a global reputation of excellence serving as a consultant to some of the largest and most prestigious companies in the nation, including clients such as Exxon, Mobile Oil, Marin Marietta Corporation, Kennecott Corporation, and Newmont Mining Company. He also served as a consultant for many overseas projects and has provided training to groundwater consultants in modeling techniques in locations as distant as Denmark, India Turkey, Egypt, Haiti, Spain, El Salvador, the Dominican Republic, and Costa Rica. His overseas projects have included providing expert witness testimony during hearings and developing modeling for mine impacts in coal, copper, gold, zinc, iron, and uranium deposits and the Andalusia iron mines of Spain. In addition, he has advised the government of the Dominican Republic on rehabilitation of the Haina Valley well-field after hurricane damage; served as one of the first groundwater engineers from the U.S. to visit the Soviet Union Geological Survey and Academy of Sciences during the Glasnost/Perestroika era; and taught French hydrologists about groundwater modeling, a request from the French Government that is considered to be a high honor as the French are quite advanced in the groundwater field. Mr. Prickett has also given expert testimony before almost every level of the U.S. court system, including the U. S. Supreme Court.

In addition to his professional accomplishments, Mr. Prickett has been actively involved with students since 1991 including serving as a guest lecturer every semester, serving as President of the GE Alumni and Industry Advisory Board for an unprecedented three terms, and serving on the UI Alumni Association Alumni Advisory Board. Tom established and endowed the Alumni Award for General Engineers to recognize students who excel in leadership and citizenship and also established and supports the Engineer in Residence Program, which enables a wide number of alumni to serve as guest lecturers and to meet one-on-one with students to provide career advice. In addition to receiving the Gamma Epsilon Distinguished Alumni Award in 1992 and the GE Alumni Distinguished Service Award in 2003, Mr. Prickett has received nearly every honorary award in his field.

To change your regular mailing address, add or change your e-mail address or update other personal information, go to the Alumni Association website at www.uiaadirectory.org

FACULTY NEWS

Professor David E. Goldberg, Jerry S. Dobrovolny Distinguished Professor in Entrepreneurial Engineering, gave the presentation, "Adaptive Computing in Design and Manufacture" before an attentive audience in Bristol, England on April 21, 2004. Goldberg's talk "The Everyday Engineering of Engineering and Organizational Innovation" discussed recent breakthroughs in *competent genetic algorithms*, search procedures that solve extremely difficult optimization problems, quickly reliably, and accurately as well as on going work in developing collaborative innovation support systems for enterprise-wide innovation using modern information technology. Alumni and friends seeking more information should click <http://www-discus.ge.uiuc.edu> and <http://www-illigal.ge.uiuc.edu>.

Dobrovolny Professor, David E. Goldberg, attended the recent MIT Engineering Systems Symposium sponsored by MIT's Engineering System Division (ESD). The symposium gathered 300 faculty and practitioners from around the globe to discuss *postmodern systems engineering*. Goldberg argued for the importance of genetic algorithms to the larger project of postmodern systems in his talk entitled [The Design of Innovating Machines: A Fundamental Discipline for a Postmodern Systems Engineering](http://esd.mit.edu/symposium/pdfs/papers/goldberg.pdf). The paper is available on the web at <http://esd.mit.edu/symposium/pdfs/papers/goldberg.pdf>

Professors Ali Yassine and David Goldberg working with CS PhD student Tian-Li Yu have developed a quantitative theory of team size. Their first paper on the subject has been accepted for presentation and publication at the ASME Design Theory Conference this fall. The paper, *Calculating Efficient Team Size: Balancing Deciding and Doing as an Elementary Optimization Problem*, develops the notion of an elementary optimization problem (EOP) to balance deciding and doing in the typical team. Extensions of theory include simple probabilistic calculations of likely decision success. Goldberg, Yu, and Yassine are continuing their work in this area to develop a family of little models to effectively, yet simply, account for span of control, transaction costs, division of labor, and other important characteristics of organizational life. The paper is available as IlliGAL Technical Report 2004013 at <http://www-illigal.ge.uiuc.edu/techreps.php3>

IlliGAL and NCSA team up to create innovation support IT.

Postdoctoral research associate in GE, Xavier Llorca (<http://www-illigal.ge.uiuc.edu/~xllora/>) is leading a team of IlliGAL and NCSA researchers to research and develop innovation technologies for creative collaborative data analysis, decision support, and problem solving in collaboration. The so-called DISCUS project (Distributed Innovation and Scalable Collaboration in Uncertain Settings) combines human and computerized agents using interactive and human-based genetic algorithms, chance discovery, and data- and text-mining techniques. The work is funded by the Office of Naval Research under the TRECC program. More information about DISCUS can be found at <http://www-discus.ge.uiuc.edu>.

Retirement Celebration Honors Three GE Faculty



Professor Ed Kuznetsov (above), Professor Harry Cook (below) and Professor Michael Pleck (bottom) receive their official certificate of retirement from the Department of General Engineering. A Retirement Reception was held in Engineering Hall on April 30th to honor all three GE faculty members.



FACULTY NEWS



Roberto Andrade, shown here with **Prof. Wozniak**, was one of two recipients of the William A. Chittenden Award. Roberto's hallmark achievements are his contributions to teaching and service as a graduate student in GE. His employer, Verizon, gave him time off to attend the Spring Awards Banquet in April to accept his award.

Nikhil Chopra, was the other 2004 recipient of the William A. Chittenden Award, for his exceptional contributions to research as a graduate student in GE. Nikhil has also received a prestigious Vodafone Graduate Fellowship for 2003-2004. The Vodafone Fellowships are awarded on a competitive basis in the College of Engineering to students whose research impacts wireless communications. Nikhil is working with Prof. Mark Spong in the area of bilateral teleoperation over wired and wireless networks.

Professor Mark Spong has been named the 2004 recipient of the John R. Ragazzini Award from the American Automatic Control Council (AACC). The John R. Ragazzini Award is given to recognize outstanding contributions to automatic control education in any form. His citation reads: *For outstanding contributions to control education through course, textbook, and laboratory development, and the invention and commercialization of innovative laboratory experiments.*

The American Automatic Control Council is the U.S. member organization of the International Federation of Automatic Control (IFAC) and is an association of the control systems divisions of eight member societies: the American Institute of Aeronautics and Astronautics (AIAA), American Institute of Chemical Engineers (AIChE), American Society of Civil Engineers (ASCE), American Society of Mechanical Engineers (ASME), Association of Iron and Steel Engineers (AISE), Institute of Electrical and Electronics Engineers (IEEE), The Instrumentation, Systems, and Automation Society (ISA), and the Society for Computer Simulation (SCS).

Professor Spong has been elected President of the IEEE Control Systems Society for 2005. The IEEE Control Systems Society is the premier international professional society in automatic control. Professor Spong has previously served the Control Systems Society as Vice-President for Publication Activities, Editor-in-Chief of the IEEE Transactions on Control Systems Technology, Associate Editor for its three major publications, the IEEE Transactions on Automatic Control, Transactions on Control Systems Technology, and the Control Systems Magazine, General Chair of the 2001 IEEE Conference on Control Applications, and as a member of the Board of Governors.

Read More about Prof. Mark Spong at www.ge.uiuc.edu/people/faculty/Spong

Professor. Manssour Moeinzadeh and **Harry Wildblood**, Coordinator of Senior Project Design presented a paper entitled "General Engineering Curriculum: A Systems Approach in Engineering Education" at the International Council On Systems Engineering (INCOSE) conference, Purdue University, May 1, 2004.



Professor Lou Wozniak received the Gamma Epsilon Excellence in Teaching Award at the 2004 Spring Awards Banquet. He is shown here with Sara Temiyasathit (L) and Dana Brnilovich (R) of the Executive Board.

Technology Entrepreneur Center Update

The 2003-4 academic year was a successful one for the Technology Entrepreneur Center, which continues to refine and expand its curricular offerings for engineering students and others.

Curriculum and Certificate Programs

This was the first full year that TEC offered two certificate programs, one for undergraduates and one for graduate students and alumni. The undergraduate certificate program is in Technology Commercialization, and the graduate certificate program is in Strategic Technology Management. A grant from the Coleman Foundation in support of these programs paid the administrative expenses associated with the programs, so no students completing them this year were required to pay the certificate fees.

TEC is collaborating with the College of Engineering's Office of Continuing Online Education, and the Center's graduate-level certificate is now part of OCEE's online certificate program offerings. (For more information, see <http://online.engr.uiuc.edu/certificates/stm.htm>.) According to Bruce Vojak, Associate Dean for External Affairs for the College, TEC's online courses and its STM certificate program are among the College's most vital and popular offerings. All told, 123 students enrolled in TEC courses online in 2003-4. These students are in addition to the nearly 900 enrolled in TEC courses on-site over the past year.

Research Projects

TEC director Dr. Ikhlaz Sidhu spearheaded a number of research projects in the areas of engineering education, technological innovation and economic development:

The E2010 Project, co-funded by the College of Engineering, is a study to understand the changing role of technical workers in the United States due to the effects of globalization. The study has preliminary findings regarding curriculum for engineering students. (A report is available at <http://www.ge.uiuc.edu/tec/e2010/>)

Professors Sidhu and R.S. Sreenivas are working with Daniel Chen, a SEE M.S. / Ph.D. candidate, on a project to further our understanding of the role wireless networks play in the design of complex systems. Sidhu and Sreenivas specifically intend to create a fundamental theory as well as a demonstrable example of a new network element building block for physical complex systems.

Dr. Sidhu and Professor Ali Yassine, along with recent M.S. SEE graduate Sahail Shariff, authored an in-depth study to model the relationships between investments in new venture creation and ROI to investors and the regional economy, based on university technology transfer.

New Communications Technologies

In addition to its new website (www.ge.uiuc.edu/tec) TEC is also driving a collaborative computing research project to bring virtual presence across campus and across the country. Using video wall concepts, the Center intends to bring in speakers from across the country to TEC courses in a synchronous virtual environment.

Business Development

Dr. Sidhu has also been making his expertise available to COE faculty members interested in commercializing their technologies in emerging business. Dr. Sidhu has been working with Professor Yoram Bresler in the Department of Electrical and Computer Engineering to help Dr. Bresler launch his company, InstaRecon. Professor Bresler's NSF-funded research led to an algorithm which increased the speed that medical computer tomography ("CAT scan") scanners can reconstruct images – by 20 to 50 times. Sidhu and a group of students have worked with Bresler on company launch and business development over the last semester. As of now, InstaRecon is in technology evaluation with the manufacturers of over 80% of the world's market in CT scanners.

Continued on page 20

UPDATE ON TECHNOLOGY ENTREPRENEUR CENTER (continued)**V. Dale Cozad Business Plan Competition**

This year was the fourth annual V. Dale Cozad Business Plan Competition, and this year's winner was FBC Systems, Inc., a company that has developed a software program which performs elaborate and extensive real-time cost calculations associated with changes in manufacturing processes. FBC team members Sebastian Schrader and Eric Hiller, working with technology developer Professor Michael Philpott from M&IE, took home \$25,000 as a first prize as well as a joint TEC and NCIIA grant. Sebastian Schrader is a Ph.D. candidate in GE's new Systems and Entrepreneurial Engineering program.

FBC has also won first prize in Harvard's business plan competition. The young company recently completed its first round of venture funding, and will be relocating to Boston. Another entrant in this year's Cozad Competition, Illitek, Inc., also entered the University of Notre Dame's business plan competition and won over \$7,000 in prizes, as well as receiving the prize for Best Undergraduate Plan and Best Presentation. Illitek, Inc, founded by UIUC student Marcus Yang, has created an online booking program for salons and spas.

TEC and OSBI grant collaboration

Dr. Sidhu and Laura Hollis have been working extensively with Dr. Paul Magelli, Director of the Office of Strategic Business Initiatives in the College of Business over the past year. Dr. Magelli wrote a grant proposal to the Kauffman Foundation in Kansas City, Missouri that resulted in the University of Illinois receiving over \$4.5 million from the Foundation to create the new Academy for Entrepreneurial Leadership Development at UIUC. The new Academy will promote entrepreneurship across the curriculum at the University of Illinois. Existing College of Engineering programs, and particularly those at the Technology Entrepreneur Center, were cornerstone elements of the Kauffman grant proposal. Both Dr. Sidhu and Ms. Hollis now serve on steering committees for the Academy.

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Senior Design Projects: Fall 2003

Action Technology Co.

Whistle Design and Production
 Francesco Bullo, Advisor
 Patrick Krause/Mindy Mathias/Michael Roche

Dywidag Systems International

Plant Layout Redesign
 Wayne J. Davis, Advisor
 Peter Bong/Michael Kolberg/Greg Snyder

Life Fitness

Flex-Deck Treadmill Design
 Brian Lilly, Advisor
 Brent Alexander/Matthew Frye/Amber Mueller

Pactiv, Inc.

Setup Information Database
 Francesco Bullo, Advisor
 Paul Kim/Brian Lareau/Karen Ka-On Li

Schutt Manufacturing Company

Welded Faceguard Non-Destructive Testing
 Harry S. Wildblood, Advisor
 Jonathan Collins/Matthew Letchworth/Christine Pope

Solo Cup

Thermoforming Material Properties Analysis
 Thomas F. Conry, Advisor
 Adam Miller/Clinton Parrish/Jeremy Shive

Stevens Industries, Inc.

Changing Table Cost Reduction Redesign
 Deborah L. Thurston, Advisor
 Joseph Peek/Patrick Quaid/Caleb Simpson

ThyssenKrupp Gerlach Company

Forging Twister/Calibration Setup Reduction
 Harry S. Wildblood, Advisor
 Katrina Appell/Kevin Marrs /Andrew Reeter

Winpak Portion Packaging, Inc.

Thermoforming Setup Time Reduction
 Ramavarapu S. Sreenivas, Advisor
 Kathryn Barnett/Abraham Sangha/Michael Zorich

**2004 Bernt O. Larson
 Project Design Awards**



FIRST PLACE

Solo Cup Company, Spring 2003
 Thermoforming Air Pressure/ Vacuum
 Analysis
 Patrick McGough
 Nathan Sis
 Caleb Wiza
 Harry S. Wildblood, Advisor



SECOND PLACE

Pelstar LLC
 Balance Beam Scale Redesign
 Jonathan Dame
 Bradley Gillette
 Michael Kearney
 Prof. Henrique Reis, Advisor

Did You Know?

- GE has the highest average gift amount for annual fund gifts (under \$10,000) out of all 10 departments in the college. That is 6% more than the #2 department!
- In the recent mailing to non-donor alumni, the department had the highest average gift amount (tied with CS at \$136).
- So far in FY04 (through the end of May), GE has seen a 9% increase in the number of donors, and an 8% increase in the numbers of dollars contributed (includes unsecured matching gifts)

See page 19 for more...

PLEASE!!!

**SEND YOUR
 EMAIL ADDRESS FOR FUTURE
 ELECTRONIC DEPARTMENT
 UPDATES**

TO: ADIMIT@UIUC.EDU

2003 LINCOLN ARC WELDING AWARD WINNERS

GOLD AWARD

Solo Cup Company -- Spring 2003

"Thermoforming Air Pressure/Vacuum Analysis"

Patrick McGough

Nathan Sis

Caleb Wiza

Harry S. Wildblood, Advisor

BRONZE AWARD

ThyssenKrupp Gerlach Company -- Fall 2002

"Flash Reduction in Crankshaft Forgings"

Cameron Croft

Robin McGowen

Obinna Orjih

Henrique Reis, Advisor

MERIT AWARDS (8)

Aurora Pump -- Fall 2002

"Data Acquisition and Hydraulic Test Setup for Pump"

Katherine Bewersdorf/ Michael Jan/ Daniel Litchfield

Francesco Bullo, Advisor

Forsheda Engineered Seals -- Fall 2002

"Conversion Coating Process Design and Control"

Timothy Ennesser/ Barbara Wagus

Harry Wildblood/Ali Yassine, Advisors

Pactive Corporation -- Spring 2003

"Heat Exchanger Fouling Analysis"

Kent Coughlin/ Matt Green/ Michael Ogrodnik

Juraj Medanic, Advisor

Life Fitness, Inc. -- Spring 2003

"Treadmill Off-Tracking Analysis"

Jacob Carnow/ Peggy Ho/ William Nitekman

Edward Kuznetsov, Advisor

Pelstar LLC -- Spring 2003

"Balance Beam Scale Redesign"

Jonathan Dame/ Bradley Gillette/ Michael Kearney

Henrique Reis, Advisor

Greenlee Textron -- Spring 2003

"Comparison of Effectiveness of Drill Bit Coatings"

Timothy Hughes/ Julia Streicher

Brian Lilly, Advisor

Emerson Power Transmission -- Spring 2003

"Laminated Collar Design"

Clifton Brock/Michael Corrigan/David Johnson

W. Brent Hall, Advisor

Dentsply -- Spring 2003

"Dental Needle Redesign"

Ryan Blocker/ Michelle McClendon/ Hwa Tsu

Harry Wildblood, Advisor

"Quality Champion for Twentieth Century" Dr. Genichi Taguchi is guest speaker for GE Seminar



Pictured at left:
Dr. Genichi
Taguchi during his
seminar, "Design
of Robust
Systems" held in
the Beckman
Auditorium.



Pictured above from left to right: Prof. Ray Price; Dr. Rajesh Jugulum; Prof. Ali Yassine; Dr. Genichi Taguchi; Dr. Husevin Leblebici, Head of the Department of Business Administration; Prof. David Goldberg.

Professor Mark Spong invested as Donald Biggar Willett Professor in the College of Engineering



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He was a faculty member at Lehigh University and Cornell University prior to joining the University of Illinois in 1984. He has held visiting positions at the National Polytechnic Institute of Mexico, the University of Waterloo, Canada, the Technical University of Compiegne, France, The Lund Institute of Technology, Sweden, the Catholic University of Leuven, Belgium, The National University of Singapore, and the Technical University of Munich, Germany.

He is currently Interim Department Head for General Engineering and President-Elect of the IEEE Control Systems Society. Within the IEEE Control Systems Society he was the Vice President for Publication Activities from 2000 to 2002 and a member of its Board of Governors from 1994 to 2002. He served as Editor-in-Chief of the IEEE Transactions on Control Systems Technology from 1997-2000.

Professor Spong has published more than 150 technical articles in control and robotics and is co-author of two books. He is a Fellow of the IEEE and a member of Phi Beta Kappa. In 1999, he received a Senior Scientist Research Award from the Alexander von Humboldt Foundation, Bonn, Germany. Other honors include the IEEE Third Millennium Medal in 2000, the O. Hugo Schuck

Award from the American Automatic Control Council in 2001, and the Distinguished Member Award from the IEEE Control Systems Society in 2002.

In addition, he is president of Mechatronic Systems, Inc., a company he founded in 1996 to design and market advanced control educational products that are in use at more than 100 universities worldwide.

The Donald Biggar Willett Professorships honor the late Mr. Willett, who attended UIUC from 1916-1922. He left the university six credits short of earning a B.S. from the Dept. of Civil Engineering. After leaving Urbana-Champaign, he joined his family's Chicago-based coal business, Suburban Coal and Supply Company, as a partner.

In the 1930's, Mr. Willett moved to Los Angeles, where he owned a bookkeeping and tax preparation business. He died in 1981 at the age of 83. According to Mrs. Willett, her late husband admired the College of Engineering for its thriftiness and honesty and, therefore, left a bequest in his memory upon her death in 1993. As stated in her will, the gift was "for research, in memory of my beloved husband." The purpose of the Willett Professorships is to increase the distinction of the College and its departments by recognizing and stimulating intellectual leadership and outstanding research.



Top:
Associate
Dean, Roscoe
Pershing and
Mark Spong.

Left Mark
shares a few
remarks.

Professor David Goldberg invested as Jerry S. Dobrovolny Professor of Entrepreneurial Engineering

David Goldberg was invested as the first Jerry S. Dobrovolny Professor in Entrepreneurial Engineering in the Department of General Engineering. David received his B.S.E. in 1975, his M.S.E. in 1976, and his Ph.D. in 1983, all in Civil Engineering from the University of Michigan. From 1976 to 1980, he held a number of positions at Stoner Associates of Carlisle, Pennsylvania, including project engineer and marketing manager. Following his doctoral studies, he joined the engineering mechanics faculty at the University of Alabama and, in 1990, he joined the Department of General Engineering at UIUC.



His awards and recognition include being named a recipient of a U.S. National Science Foundation Presidential Young Investigator Award in 1985 and an Associate of the Center for Advanced Study at UIUC in 1995. He was founding chairman (1999) and is a Senior Fellow (2003) of the International Society for Genetic and Evolutionary Computation, and his book, *Genetic Algorithms in Search, Optimization and Machine Learning* (Addison-Wesley, 1989) is the fourth most widely cited reference in computer science, according to CiteSeer.

He serves as the director of the Illinois Genetic Algorithms Laboratory, and his research focuses on the design, analysis, and application of genetic algorithms—computer procedures based on the mechanics of natural genetics and selection. His most recent book, *The Design of Innovation: Lessons from and for Competent Genetic Algorithms* (2002, Kluwer), shows how to design scalable genetic algorithms and how such algorithms are similar to certain processes of human innovation. He is also author of *Life Skills and Leadership for Engineers* (1995, McGraw-Hill) and his affiliation with the Technology Entrepreneur Center has led him to join the founding teaching team for a business plan workshop course now offered regularly to young entrepreneurial engineers. Goldberg is currently developing quantitative theories of business organization as well as tools for organizational innovation via online integration of data mining, chance discovery, and interactive and human-based genetic algorithms.

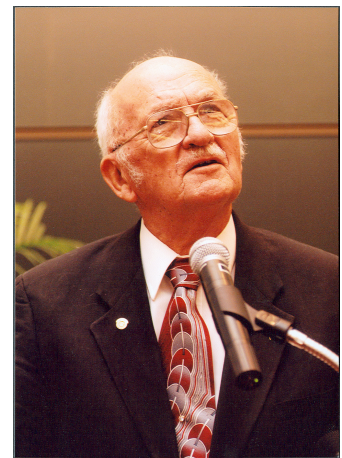
Jerry S. Dobrovolny was an integral member of General Engineering for nearly 40 years, serving as Department head for almost 30 years from 1959 until his retirement in 1987. Under Dobrovolny's leadership, the GE Department established many new initiatives, including the Senior Design Project Course; Gamma Epsilon, the GE honorary society; and the publication of the first GE Alumni Newsletter.



Top: Dean David Daniel presents Professorship Medallion to Prof. David Goldberg.

Left: Dean David Daniel, Prof. David Goldberg, Prof. Jerry Dobrovolny.

Right: Jerry Dobrovolny shares inspiring remarks during the Investiture Ceremony.



Tom Prickett receives Alumni Award for Distinguished Service from College of Engineering



Dean David Daniel (L) presents the COE Alumni Award to Tom Prickett.

Tom Prickett, BSGE 1960, was honored at the College of Engineering Awards Convocation for his contributions to and applications of knowledge, entrepreneurship, and creativity, fostering the development of young people, and exceptional service to the Department of General Engineering.

Tom has over 42 years of worldwide experience in groundwater research, aquifer evaluation, well-field development and design, mining impact analysis, mass transport problem and process investigations, computer modeling, conducting modeling seminars, and litigation as an expert witness. He was one of the first to recognize the importance of the digital computer on the analysis of groundwater problems and developed several of the first groundwater models in the industry.

He established his own consulting business in 1981 and has established a global reputation of excellence serving as a consultant to some of the largest and most prestigious companies in the nation, including clients such as Exxon, Mobile Oil, Marin Marietta Corporation, Kennecott Corporation, and Newmont Mining Company. He also served as a consultant for many overseas projects and has provided training to groundwater consultants in modeling techniques in locations as distant as Denmark, India Turkey, Egypt, Haiti, Spain, El Salvador, the Dominican Republic, and Costa Rica. His overseas projects have included providing expert witness testimony during hearings and developing modeling for mine impacts in coal, copper, gold, zinc, iron, and uranium deposits and the Andalusia iron mines of Spain. In addition, he has advised the government of the Dominican Republic on rehabilitation of the Haina Valley well-field after hurricane damage; served as one of the first groundwater engineers from the U.S. to visit the Soviet Union Geological Survey and Academy of Sciences during the Glasnost/Perestroika era; and taught French hydrologists about groundwater modeling, a request from the French Government that is considered to be a high honor as the French are quite advanced in the groundwater field. Mr. Prickett has also given expert testimony before almost every level of the U.S. court system, including the U. S. Supreme Court.

In addition to his professional accomplishments, Mr. Prickett has been actively involved with students since 1991 including serving as a guest lecturer every semester, serving as President of the GE Alumni and Industry Advisory Board for an unprecedented three terms, and serving on the UI Alumni Association Alumni Advisory Board. Tom established and endowed the Alumni Award for General Engineers to recognize students who excel in leadership and citizenship and also established and supports the Engineer in Residence Program, which enables a wide number of alumni to serve as guest lecturers and to meet one-on-one with students to provide career advice. In addition to receiving the Gamma Epsilon Distinguished Alumni Award in 1992 and the GE Alumni Distinguished Service Award in 2003, Mr. Prickett has received nearly every honorary award in his field.

To change your regular mailing address, add or change your e-mail address or update other personal information, go to the Alumni Association website at www.uiaadirectory.org

Faculty News



Professor Scott Burns was selected as a recipient of the 2004 State-of-the-Art of Civil Engineering Award by the American Society of Civil Engineers (ASCE) Technical Committee on Optimal Structural Design. The award citation will read, "For the report, *Recent Advances in Optimal Structural Design.*" He will be presented the certificate and plaque at the ASCE National Convention in Baltimore, Maryland in October 2004.

IlligAL researchers set records at GECCO. IlligAL researchers will present 14 papers at the leading international conference on genetic and evolutionary computation to be held June 25-30, 2004 in Seattle, Washington. IlligAL alums Martin Pelikan and Dirk Thierens, and current IlligAL member Kumara Sastry are organizing a special workshop on "Optimization by Building and Using Probabilistic Model (OBUPM-004)". Steve Upton (Mitre) and GE faculty member Dave Goldberg are organizing a workshop on "Military and Security Applications of Evolutionary Computation". More information regarding the conference and the workshops can be found at <http://www.isgec.org/gecco-2004>.

GE-affiliated students build 90-node IlliWulf III cluster in Transportation Building. Members of the Illinois Genetic Algorithms Laboratory (IlligAL) headed by IlligAL Student Lab Director Kumara Sastry (<http://www-illigal.ge.uiuc.edu/~kumara/>) built an AMD-Athlon-powered 90-node diskless Linux-based compute cluster. The compute cluster, IlliWulf III, is being utilized to advance the theory, practice, and design of competent and efficient genetic algorithms to solve hard optimization and machine learning problems, quickly, reliably, and accurately. IlliWulf III replaces two predecessor cluster machines that were smaller and less powerful.

Office of Technology Management offers GE-developed technology. GE-pioneered technology was offered to the public at a technology showcase program, I-Emerging on October 9, 2003 (<http://www.vpted.uillinois.edu/Events/iemerging.asp>). The technology called hBOA or the Hierarchical Bayesian Optimization Algorithm solves hard optimization problems in commerce, science, and engineering quickly, reliably, and accurately. Former IlligAL member Martin Pelikan (currently assistant professor at University of Missouri at St. Louis, <http://www.cs.umsl.edu/~pelikan/>) developed the technology as part of his PhD dissertation in computer science under the direction of GE faculty member David E. Goldberg. GE alums and friends interested in learning more about hBOA can contact David Washburn at OTM dwashbur@ad.uiuc.edu or click on the hBOA website <http://www-hboa.ge.uiuc.edu/>

Harry E. Cook Seminar Series Established

The Harry E. Cook Seminar Series on the Business Side of Engineering has been established in honor of Professor Harry E. Cook, who served as Department Head of General Engineering from 1998-2003. This seminar series fund has been established through generous gifts from the GE Alumni and Industry Advisory Board Members and we invite all GE alumni to support this outstanding initiative. The first seminar will be offered during the 2004-05 academic year.

FROM YOUR ALUMNI BOARD PRESIDENT



Mike Brunetto, BSGE '77

2004-2005 ALUMNI BOARD OFFICERS

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The mission of the Board is to advise the Department Head and Staff of the industry perspective relative to the curriculum, senior capstone design projects, research initiatives, and any other topics on which the Department can use the Boards' expertise and experience to better serve industry's needs. Anyone interested in serving on the Alumni and Industry Advisory Board is welcome to submit her/his name for consideration to adimit@uiuc.edu.

I hope you've read all of the positive news about General Engineering in this edition of the newsletter. Freshmen enrollment, placement rates, academic honors and recognition for faculty, staff, alumni and students continue to reinforce the unique value that GE brings to today's engineering graduates. I'm privileged to be on campus several times a year as an Engineer in Residence and as President of the Alumni Board. You may not have the same opportunities, but that doesn't mean you can't participate in promoting the legacy of General Engineering. With apologies to the U of I Alumni Association for the GE references, here are ten things you can do to support and promote our department:

1. Keep abreast of U of I and GE issues, accomplishments and trends by reading alumni and college or departmental publications.
2. Remain connected to the department by keeping Angie up-to-date with your address and background.
3. Share positive General Engineering experiences with your colleagues and friends.
4. Send a "thank-you" note or e-mail to a professor who made in difference in your life. (Active and retired faculty e-mail links are available on the General Engineering website at www.ge.uiuc.edu)
5. Show your pride by displaying your diploma in your home or office.
6. Recommend General Engineering to high-ability high school students.
7. Hire a General Engineering graduate.
8. Volunteer to serve as a mentor to a General Engineering student or graduate.
9. Participate in the College of Engineering annual fund campaign, and designate your gift for General Engineering.
10. Join the Alumni Association - General Engineering will receive a portion of your lifetime membership dues!

Each of these suggestions takes very little time and requires no travel, yet taken together, can have an immense influence on the department and its graduates.

Finally, you've probably heard that the Executive Committee of the College of Engineering has recommended the proposed merger of General Engineering and Industrial Engineering. If the merger takes place, it will result in a new department name, most likely including "systems engineering" or a similar moniker.

You should know that the Board views this proposed merged as an endorsement of the strength of the Department; that our discussions with Dean Daniel validates his support of the Department and expansion of its mission; and that the B.S. General Engineering will continue to be offered, no matter what the new Department is named. In short, the principles that have made the GE curriculum and degree unique will remain, and you will continue to have a department to call "home" in the College of Engineering.

Best wishes for a safe and enjoyable summer.

Sincerely,
Mike Brunetto, President
GE Alumni and Industry Advisory Board

**2004 ALUMNI REUNION FOR GENERAL ENGINEERING
OCTOBER 29-30**

On behalf of the entire Department and the GE Alumni and Industry Advisory Board, we would like to invite you back to campus for our Annual Alumni Reunion. This is a great opportunity to visit with old friends, professors (old and new), and classmates. We hope you can join us!

The GE Alumni Reunion Weekend is planned for Friday, October 29th and Saturday, October 30th. The GE Reunion is from 5:00-7:00 p.m. on Friday, October 29th at the Transportation Building, with dinner featuring a local favorite for barbeque turkey and beef—Longhorn Smokehouse. (Sauce is served separately, vegetarian options available.)

The GE Reunion is \$15.00 per adult (age 12 and older) and \$5.00 per child.

Reservation information is available on the Alumni Express Link at www.ge.uiuc.edu. The reservation deadline is Monday, October 25th.

On Saturday, October 30th you are invited to attend the College of Engineering Pre-Game Party and cheer-on the Fighting Illini Football Team in the Homecoming Game against Iowa.

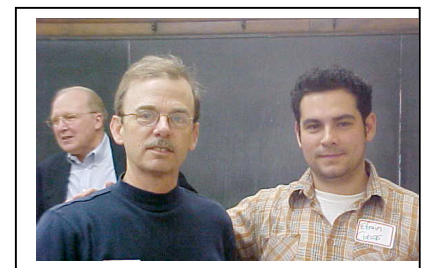
For detailed information about all of the College of Engineering events during Homecoming weekend (football tickets, hotel rooms, reservations) go to <http://www.engr.uiuc.edu/alumni/events/>

The faculty and staff are eager to see you again!

Sincerely,
*Mark Spong, Mike Brunetto, &
Angie Dimit*



IMAGES FROM LAST YEAR'S REUNION



Jay Goldberg receives Gamma Epsilon Distinguished Alumni Award



Gamma Epsilon President, Elaine Kratochwil (L), Treasurer Jeff Kustus, Jay Goldberg, and Engineering Council Chair Keith Glascock (R)

Dr. Jay Goldberg completed his BSGE in 1979. He furthered his education with an M. S. degree in Bioengineering from the University of Michigan, a Master of Engineering Management degree from Northwestern University, and a Ph.D. in Biomedical Engineering (Biomaterials) from Northwestern University. He is also a registered Professional Engineer in Illinois and Wisconsin.

Dr. Goldberg has fourteen years of product development experience with several medical device companies including DePuy (Warsaw, IN), Baxter (Deerfield, IL), Surgitek (Racine, WI), and Milestone Scientific (Deerfield, IL). Dr. Goldberg has two patents: U. S. Patent No. 5,085,629, Biodegradable Stent; and U.S. Patent No. 4,787,884, Ureteral Stent Guidewire System.

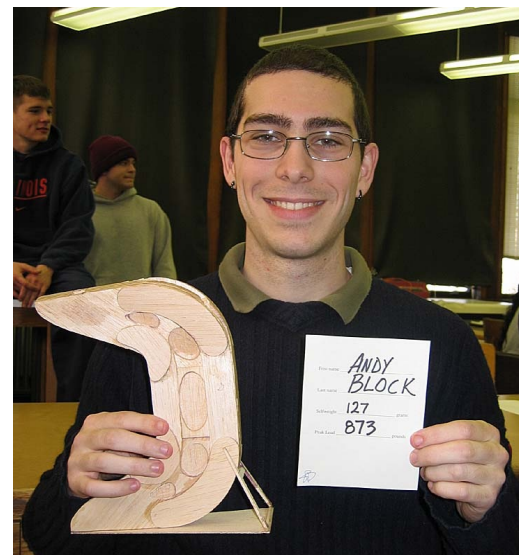
He is currently Director of the Healthcare Technologies Management Program at Marquette University in Milwaukee, WI. He also is an Assistant Professor of Biomedical Engineering at Marquette, and is an Assistant Adjunct Professor of Biophysics, Medical College of Wisconsin. His research interests include: medical device product development, biomaterials, degradation and failure of implantable medical devices, and forensic engineering. Dr. Goldberg resides in Libertyville, IL with his wife, Susan, and children Dena, Rebecca, and Ellie.



The 2004 Quaker Oats Scholarship in General Engineering recipient is Evan Vijithakumara.



Melissa Kosobud received the Mary Chow Scholarship for being the top female in the freshman class, maintaining a 4.0 GPA.



Andy Block was the 2004 recipient of the Sprengel Award. According to Prof. Scott Burns, his instructor, "Andy's design took advantage of the grain orientation of the balsa wood to strengthen it. He cut away areas of wood where lower stresses were acting in order to improve the load-to-weight ratio, which was 20% higher than the second place design, and 240% higher than the average of all designs."

GE ALUMNI NEWS

SENIOR DESIGN PROJECTS: Spring 2004**Alltech Associates, Inc.**, "Solid Phase Extraction Production Equipment Design"

Harry S. Wildblood, Advisor: Donna Cisko/Stacy L. Simon/Sara Temiyasathit

Applied Composites Corporation, "Heat Exchanger Failure Detection/Prevention"

Narayana R. Aluru, Advisor: Clifford D. Borowicz/Joseph F. Frankini/Steven C. Power

Atlas Material Testing Technology, LLC, "Xenon Lamp Cooling System Redesign"

Narayana R. Aluru, Advisor: Erick A. DaMota/Andrew B. DePriest/Christopher G. Peschang

Brite-O-Matic Manufacturing, Inc., "Automatic Car Wash Redesign"

Ali Yassine, Advisor: Daniel A. Couillard/Anthony E. DiVincenzo/Timothy L. Seiwert

ConAgra Store Brands, "Aerosol Packaging Efficiency Improvement"

Scott A. Burns, Advisor: Nicholas P. Celani/Chaveli A. Ezpeleta/John W. Fay/Christopher M. Pazdan

Dentsply International-Rinn Division, "X-Ray Duplicator Redesign"

W. Brent Hall, Advisor: Michael P. Labowicz/Karthy Rajendran/Anthony M. Rotello

Designed Stairs, Inc., "High Speed Wood Lathe"

L. Daniel Metz, Advisor: Michael P. Lesus/Christopher J. Rogers/Nicholas R. Wills

Driv-Lok, Inc., "Plant Layout Consolidation and Redesign"

W. Brent Hall, Advisor: M. Scott Donovan/Susan M. Shah/Samantha S. Szymczak

Dywidag Systems International, "Semi-Trailer Loading Redesign"

Wayne J. Davis, Advisor: Alena R. Doyle/Todd M. Riordan/Andrew B. Yount

Dukane Corp., Audio Visual Products Div., "LED Projector: Light Source and Optics"

Scott A. Burns, Advisor: Jordana R. Goldman/Nicole J. Kamath/Steven C. Kinate

Freudenberg Household Products, LP, "Easy to Store Mop/Broom Handle Design"

Henrique L. M. dos Reis, Advisor: Elaine E. Kratochwil/Thomas Ribarsch/Sara A. Trotta

Innerpac, Inc., "Partition Strip Production Automation"

Harry S. Wildblood, Advisor: Larry Y. Cheng/Sadie M. Isermann/Michael P. Schmidt

L-3 Communications, "Elapsed Time Indicator Failure Analysis and Redesign"

Thomas F. Conry, Advisor: Kristofer G. Fagerman/Timothy D. Johns/David J. Nichols

Life Fitness, "Cross-Trainer Arm-Lockout Prototype Design"

David E. Goldberg, Advisor: Doron Galili/Cory H. Lazar/Nicholas D. Pankey

Life Fitness, "Treadmill Smart Stop System Redesign"

Francesco Bullo, Advisor: Sara C. Fitzgerald/Jeffrey P. Johnson/Lorely G. Sison

Marsco Manufacturing, LLC, "Scrap Analysis and Reduction of a Heat Barrier Coated Glass Production Line"

Deborah L. Thurston, Advisor: Anneli Alers/Mark V. Burasinsanga/Erin M. Cavanaugh

Marsco Manufacturing, LLC, "Thermal Copper Deposition for Heated Glass Products"

Deborah L. Thurston, Advisor: Jeffrey J. Kustus/Brett A. Marvel/Jeffrey W. Olson

Medela, Inc., "Nursing Mother Simulation System"

Carolyn Beck, Advisor: Molly E. Hathaway/Riddhi P. Kasudia/Daniel P. Sullivan

North American Lighting, "Analysis of Scrap Reduction in Bezel Production Due to Contamination"

Brian Lilly, Advisor: Christopher R. Babel/Andrew W. Meyers/Shana A. Stricker

Pelstar, LLC, "Portioning Scale Damper Redesign"

Henrique L. M. dos Reis, Advisor: Sarah Hussain/Joseph A. Nowak/Jeffrey M. Voyt

Solo Cup, "Paper Cup Leak Detection"

David E. Goldberg, Advisor: Gary J. Merrigan/Andrew R. Mondri/Patrick C. Sharkey

Suncast Corporation, "Injection Molding Setup Time Reduction"

Ramavarapu S. Sreenivas, Advisor: Erika M. Hughes/Joseph A. Kupfer/Geoffrey M. Price

Yeomans Chicago Corporation, "Pump Test Data Acquisition System"

Brian Lilly, Advisor: Dana M. Brnilovich/William J. Krueger/Tyler A. Masterson

Seniors honored at 2004 Spring Awards Banquet



Jerry S. Dobrovlny Award presented to Geoff Price

Geoff graduated with a Secondary Field of Concentration and a Minor in Technology and Management and a GPA of 3.68. He studied abroad at Tsinghua University, Beijing, China in 2002. He interned with Tucker Alan, Inc – Business and Litigation Consulting in 2003 and served as a grader for GE ??? in the spring semester of 2003. Jeff held the positions of Executive Partner and Project Manager for the Office of Technical Consulting Resources, has been Chair Student Advisory Board of the Engineering Honors Council for the past two years, and has served on the Engineering Council Executive Board as Academic Programs Director. He has been involved in Illini Pride/Orange Krush, General Engineering Admissions Representatives, and served as Facilities Chair for the National Association of Engineering Student Councils Midwest Conference.

Edward S. Fraser Award Recipient is Mitch Goldenberg

Mitch completed his senior year in General Engineering in December 2003 with a Secondary Field of Concentration and a Minor in Mathematics and a GPA of 3.91. He served on the Gamma Epsilon Executive Board from 2001-2003 as Treasurer and Publicity Chair, and held numerous Executive Board Offices in Sigma Phi Delta Engineering Fraternity from 1999-2004. Mitch also served as a Grader for GE 232 and 288 for three semesters. Mitch has traveled to Israel and Poland through his Mission Work. He volunteered with the Intensive English Institute and continues to be integrally involved with the Chi Alpha Christian Fellowship where he has served as President, Treasurer and Small Group Leader. He completed a spring semester internship with the Joshua Project at Crossroads Campus Church in Urbana.



Andrew Mondt earns Distinguished Service Award

Andrew is graduating with a Secondary Field of Concentration in Manufacturing Engineering. He completed a Co-op in Six Sigma Damage Control with General Electric where he received the General Electric Manager's Award for leading his project team to 2nd place in the design competition. He worked as an intern with General Mills, Inc. where he received the highest performance rating for an intern in the company, and as a Productivity Analyst for McDonald's Corporation. He became Vice President of General Engineering Placement System as a sophomore and has served as President for the past two years. Since 2001 he has served as the Volunteer Illini Projects Director of Community Justice and Public Relations. He has been an officer with the Garner Leadership Living and Learning Community and a participant in the Insight Illinois Leadership Program. He has earned the Pollution Prevention and Industrial Training Certification from Illinois Waste Management and Resource Center and wrote and published a 50 page tutorial for ANSYS – finite element analysis software – for the department, which is used in two design classes. Andrew has often served as host to prospective student families for the past three years. He is also a member of Gamma Epsilon.



Additional Awards Banquet Highlights

Assoc. Dept. Head, Professor Manssour Moeinzadeh presented the Jewett Award to Karen Czarnecki (L) and the Hoelscher Award to Kristen Anton (R).



Professor Brent Hall, Chair of the GE Awards Committee with the Rose Scholarship Recipients, Katie Eaton (L) and Megan Zachar (R).



The Hamming Scholarship Recipients, Jennifer Wicks (L) and Eric Wilson (R).



Alumni Board President, Mike Brunetto presented the Alumni Award to Samantha Rollins (L) and Ly Vu (R).



Bill MacFadden (L) received the Daniel P. Krueger Scholarship.

The James and Carla Christensen Scholarship Winner, Grace Yaguchi, shown here with Jim and Carla Christensen.



Professor Brent Hall presented the Donald W. White Scholarship to Andrew Hardy and Jenna Rowell.

