



General Engineering Newsletter

University of Illinois at Urbana-Champaign
Volume 35, Number 2 • Spring 1993

Prof. Kim's Research Highlights Visual, Geometric Reasoning

Visual and geometric reasoning underlies every aspect of engineering practice and education.

Efforts are being made at the Solid Modeling Laboratory of the General Engineering Department under the direction of **Yong Se Kim**, (1) to provide computer-based aid to improve human visual reasoning capability, and (2) to enhance automated geometric reasoning for computer-integrated design and manufacturing.



Yong Se Kim

Prof. Kim's research in geometric representation and reasoning has been focused on exploiting fundamental geometric characteristics of products to support product design and manufacturing applications. He has developed a novel method in recognizing high-level geometric entities, called *form features*, from the product shape models to support diverse product and process design activities.

The research on form feature recognition has received significant attention in the field of computer-integrated engineering as evidenced by a Best Paper Award in 1991 *ASME Computers in Engineering* conference.

Prof. Kim's form feature recognition research is currently supported by a NSF Research Initiation Award that started in 1992. Projects on integrating the form feature models with machining process planning and with geometric reasoning for assembly product and process design are being conducted.

At the ACM Symposium on Solid Modeling to be held in Montreal, May 1993, he will be presenting a paper co-authored with Douglas L. Waco on geometric reasoning for machining features. Waco who received his MS degree in General Engineering under the advise of **Prof. Kim** in Jan. 1993, is currently at the Cummins Engine Company, Inc., Columbus, Indiana.

Prof. Kim has organized special sessions on Feature-Based Modeling at the ASME Computers in Engineering Conference to be held in San Diego, August 1993.

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New Building Changes Gives GE Opportunity For New Labs, Programs

Former students who have not visited the Transportation Building this academic year may need a floor plan or a personal guide to find their way to former classrooms, laboratories or offices of faculty members.

With the relocation of the Department of Aeronautical and Astronautical Engineering to Talbot Laboratory, extensive remodeling has taken place. This has resulted in moves of several faculty offices, creation of new laboratories and classrooms as well as some building changes.

Although several projects already have been completed it is expected to take another year and a half to complete the work.

Much of the remodeling of teaching space is being financed by Engineering tuition surcharge funds.

Faculty offices formerly located on the basement level have been relocated on the first and second floors.

Some new laboratories are to be located in the basement and most of the graduate assistant offices are now there.

The first floor is undergoing extensive rehabilitation. Several rooms—notably 101, 112-114—are being converted into lecture rooms and eventually there will be four large lecture rooms on the first floor.

The office on the north end of the first floor corridor formerly occupied by **Prof. L. D. Metz** has been removed. A new fire door is to be installed on the north wall.

Also the new first floor lecture rooms will be cooled once the air conditioning installation has been completed.

The Nondestructive Evaluation Laboratory of **Prof. Henrique L. M. Reis** has been moved from a house on Springfield Ave. into space freed up in the basement of the Transportation Building.

A new three-hour course, GE 393 Nondestructive Evaluation for advanced students and taught by **Reis** has been developed in conjunction with the laboratory.

A Senior Design Studio is to be located in Room 308. The room serves as a repository for past GE 242 reports, and a collection of references and catalogs as well as a variety of hand tools and several work tables and desks.

The studio also has been equipped with 250v/30a power and a distribution network for compressed air.

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From the Department Head



I would like to thank our students for their service, good will and generosity. Our primary job at the university is to educate students, undergraduate and graduate, but education is a two-way process and our students also influence and affect us by their actions and values. As I reflect over the events of this year, the enthusiasm and willingness of our students to make our Department better is especially notable. An increase of space in the Department allowed us to approach our goal of providing decent space in support of our senior project design activity. The room for the design studio needed paint and rewiring, and the student leaders in ISGE made a generous gift from their treasury to the Department toward developing this facility. The members of Gamma Epsilon Honorary Society have consistently displayed leadership and given service to the Department; this year they teamed with ISGE to organize the General Engineering Open House Activities and did a fantastic job. With guidance from Professor Mark Spong, they had the opportunity to show off the Department—and their work—and in turn won a number of awards for their efforts. Gamma Epsilon also provides the funds to support their Outstanding Teaching Award each year; the honor of receiving this award is highly prized by the recipients.

Throughout the campus, students volunteer through various philanthropic projects from fund raising for Easter Seals, to helping with Blood Drives, to reading stories to children in elementary school. Within the College, students from all departments work together for their common good through Engineering Council and Tau Beta Pi, with the goal of providing leadership opportunities for as many students as are interested and service to their fellow students and the College of Engineering.

These are only a few examples to show how our students are learning about community service, which will serve them and their communities well as they take their place among the leaders of society in the years to come.

*Thomas F. Conry
Professor and Head*

GE Brochure Available

A new brochure, "Engineering for the Real World," highlighting the General Engineering department is now available in 117 Transportation Building. The publication describes the philosophy, courses, projects and choices offered to GE students.

Kim's Research (continued from Page 1)

Among the papers he organized are several that included representative feature recognition research currently supported by NSF Design and Manufacturing Systems Division and recent research results from Germany and Korea.

Prof. Kim developed a new graduate course, *Solid Modeling and CAD/CAM Applications*, with the objective of introducing the foundations of integrated automation of product engineering applications. Throughout the course, the coherent view of successful approaches in solving geometry-based problems by combining a rigorous mathematical foundation and application-specific technological information is emphasized.

In teaching *Engineering Graphics and Design*, a course for the beginning undergraduate engineering student, he identified the importance of *right* education of visual reasoning early in the engineering curriculum. He is developing fundamental teaching methods addressing visual analysis and synthesis for physical objects and processes in three-dimensional space.

While most engineering graphics curricula have dealt with only the modeling aspect of the imagining-modeling-seeing process of visual ideation, he is developing an intelligent instructional software system which will guide the student's visual reasoning steps to enhance the student's capability in this entire visual ideation process.

The support for this software development is being solicited from NSF, computing hardware vendors (including Sun Microsystems, Inc.), and the University of Illinois Educational Technologies Board.

Prof. Kim plans to expand his efforts in research and teaching to encompass a wider spectrum of product realization procedures. First, he intends to focus on the integration of industrial design and engineering design. Industrial designers have emphasized on the styling and user aspects of products, while design and manufacturing engineers focus on the functionality and manufacture of products.

Educational structures and industry practices have been rather inefficient in integrating these product development processes whose tight integration is crucial for the success of a product.

He plans to contribute in bringing these disciplines together by developing educational programs in conjunction with the School of Art and Design and by establishing collaborated design projects with industrial design companies.



Gamma Epsilon Designates Northwest Airlines Officer As 1993 Distinguished Alum

An airline executive became the 20th Annual Gamma Epsilon Distinguished Alumnus when he was honored at the GE Spring Awards Banquet April 15 at the University Inn.

Louis J. Mancini, Vice President, Engineering and Fleet Operations, Northwest Airlines, Inc., St. Paul, MN received a plaque commemorating the recognition.

The honor is bestowed each year on a General Engineering graduate for both outstanding accomplishments in one's profession and continuing contributions to the Department and/or UI College of Engineering.

It was presented by **Nancy Erler**, Inverness, IL, Gamma Epsilon President.

Mancini, a native of Chicago, was graduated from the UI with a BS in 1972. He received a MS in 1973 and Ph.D. in 1975 from Stanford University.

He was named to his present position in July 1991. He is responsible for aircraft reliability, engineering, inspection, quality assurance, planning, systems and automation, technical training and safety.

Before joining Northwest, he was General Manager of Engineering for United Airlines. He also served as Director of Maintenance Analysis and Research, 1985-87, and Director of Maintenance Automation, 1987-90, with United.

Mancini previously held management positions at Chevron Corp. and Shell Development Co. where he worked in strategic planning, program management, research and manufacturing.

He received a fellowship at Stanford U. from June 1972-June 1973 and held a National Science Foundation Fellowship June 1973-August 1975.

Mancini is chairman of the Air Transport Association's Technical Information Committee and former co-chairman of its International Airworthiness Communications Working Group.

He is married and father of two sons.

1992 Lincoln Arc Awards Go To Twelve GE Students

Twelve General Engineering students won Lincoln Arc Welding Foundation Awards in the 1992 Student Engineering Design Competition.

A Silver Award (second place) granting \$750 was given to **Brian T. Fay**, South Elgin, IL, for "Design of a Feeding Mechanism." He is now a GE graduate student. **Prof Mark Strauss** was faculty advisor.

A Bronze Award (third place) of \$500 went for the project: "Salvage of Molded Shafts for Frame Breakers." The team was composed of **Kenneth J. Coulter**, Batavia, IL; **Christine E. Fiore**, Orland Park, IL; and **Jerry A. Southard**, Rockford, IL. Faculty advisor was **Prof. Brent Hall**.

Another Bronze Award of \$500 was given for the project: "Separation of Petroleum Contamination from a Nitrogen Stream During Pipeline Blowdown." The team was composed of **John L. Acree**, Mt. Carmel, IL and **Lisa Elaine Boreland**, Barrington, IL. **Prof. Hall** was faculty advisor.

A merit award of \$250 was awarded for "Motorized Table Height Adjustment Mechanism." The team consisted of **Michael Robert Gogola**, Oak Forest, IL; **Tara Leigh Lloyd**, Mt. Prospect, IL; and **David Robert Nebl**, Des Plaines, IL. **Prof. Henrique Reis** was faculty advisor.

A second merit award went to the project, "Bottom Ash Locator for a Water Impounded Hopper." Students involved were **Sassan Attari**, Bairington, IL; **Ernst Gaertner**, Urbana, IL; and **Christine Shields**, Joliet, IL. **Prof. Reis** was faculty advisor.

The results of the 1992 competition put the total awards from Lincoln Arc Welding to General Engineering students to 34 in the past 22 years.

GE Placement Service Cites Merits of Graduates

A new General Engineering Placement Service has been inaugurated to assist GE graduates in securing their first position by stressing the merits of a GE degree.

A mass mailing was sent to 300 GE alumni describing GEPS and asking for key information such as persons in their firms to contact, a description of the company's specialties and the opportunities for employment.

The initial response was gratifying and the results will be coordinated through GE 291 (Senior Seminar) and GE 242 (Senior Project).

Plans for a more extended mailing is planned to build an even greater base of potential employers.

A list of the companies responding will be made available to GE students to use the information in securing positions with those firms.

Student, Professor, Alumnus Receive Honors April 15 at Annual Awards Banquet

Students, a faculty member and an alumnus received awards at the annual General Engineering Awards Banquet April 15 at University Inn, Champaign.

It was jointly sponsored by Gamma Epsilon and the G.E. Department.

Anne L. Marsan, Downers Grove, IL, received the Edward S. Fraser Award as the outstanding senior in General Engineering. The award consists of \$200 cash and a plaque. Also her name will be inscribed on a wall plaque that is displayed in the Transportation Building.

Recipient of the Randolph P. Hoelscher Award was **Mrs. Kristine M. Palmer**, Champaign, IL. She received \$100 cash and a certificate signifying exceptional scholarship, leadership and cultural breadth as the outstanding GE junior.

The Distinguished Alumni Award was presented to **Louis J. Mancini**, St. Paul, MN, by Gamma Epsilon. (Details appear in a separate item.)

Prof. Thomas R. Woodley was presented the Excellence in Teaching Award, determined by Gamma Epsilon. The honoree receives \$500 in cash and a plaque.

The Jerry S. Dobrovolny Award given annually to a GE student for demonstrated outstanding leadership qualities and academic scholarship went to **William F. Grambley**, Elburn, IL. A certificate and \$500 in cash were awarded.

Christina Schumacher, Des Plaines, IL, received the Elizabeth Ruff Award consisting of \$500 cash. The criteria for the award is a sophomore or junior woman in GE who demonstrates the traits of sincerity, cooperation and supportiveness.

Mrs. Julie A. Jewell received the prestigious William A. Chittenden Award as the outstanding Master of Science Graduate student in G.E. The award consists of \$1,000 and a plaque.

Other awards included:

- Herbert J. Sprengel Award - \$100 and a certificate to **Eric D. Strand**, Rapids City, IL for the best design project by a GE junior;

- Bernt O. Larson Project Design Award (First Place) - \$150 and certificate each to **Michael R. Gogola**, Oak Forest, IL; **Tara L. Lloyd**, Mt. Prospect, IL; and **David R. Nebl**, Des Plaines, IL for their project, "Motorized Table Height Adjustment Mechanism." **Prof. Henrique L. M. dos Reis** was faculty advisor.

Second prize of \$75 and certificate each to **Thomas M. Kelley**, Merna, IL; **Mindy B. Souden**, Arlington Heights, IL; and **Dwight T. Todd**, Carmel, IN for "Air Intake Pre-cleaner for a Modular Diesel Engine." **Prof. Roland L. Ruhl** was faculty advisor.

GE Students Place High In EOH Exhibit Contests

General Engineering students did very well in the annual Engineering Open House competition February 26-27.

This year's theme was "Forging New Frontiers."

GE entries and their place in the judging on the College of Engineering level include:

- First prize for Original Research in a Given Graduate Field to **Aaron Rogers** for "Industrial Applications of Solid Modeling in AutoCAD";

- First prize for Interdisciplinary Projects to **Fredrick Barthel, Jerry Maloney, Michael Scott and Allen Saxson** for "Reducing Human Joint Damage in Wheelchair Propulsion";

- Most Creative Design Award to **Andy Blair** in W. J. "Jerry" Sanders Creative Design Competition;

- Second Prize in Central Exhibits to **Brad Bishop (ECE) and Jon Huang** for "Acrobot";

- Second prize for projects that show Engineering in Today's Society to **Anne Marsan** for "Visualization and Animation of Manufacturing Process in Decision Making";

- Third prize for Original Research in a Given Undergraduate Field to **Bill McGrath** for "A Tactile Pacer";

- Third prize in Back to the Basics to **Kristine Palmer and Cherrie Estrada** for "Adhesives, Joints, Grains and Structures of Balsa"; and

- Fourth prize for projects that show Engineering in Today's Society to **Jon Smejkal** for "Computer Graphics in Engineering."

In the Department of General Engineering Faculty EOH prize competition, winners were:

- First prize of \$150 to **Barthel, Maloney, Scott and Saxson** for their project, "Reducing Human Joint Damage in Wheelchair Propulsion";

- Second prize of \$75 to **Brad Whitmore** for "Robot Simulators: An Introduction to CIM"; and

- Third prize of \$50 to **Saul Lopez** for "General Engineering in a Nutshell."

Departmental judges were Profs. **J. V. Medanic, M. H. Reis** and **M. G. Strauss**.

Prof. M. W. Spong served as faculty advisor for GE participation in EOH activities.

GE 242 Posters Displayed

This year a number of GE 242 students prepared poster presentations on their projects for Engineering Open House. The projects sponsored by Arachnid, Benteler, Cabot, Cummins, Equipto, General Binding, General Electric, MCI and U.S. Army CERL were presented to the public in this manner. This exercise will become a required part of the course in future semesters.

Faculty Notes

Prof. Michael Pleck

Prof. Michael Pleck has been awarded an educational grant from Sun Microsystems Computer Corporation. The award consists of a Sun Sparcsystem 10 Model 30. The graphics-enhanced workstation will be used for the development of improved teaching strategies, courseware and grading software for GE 103, Engineering Graphics and Design. This workstation augments the 57 Sun IPX workstations recently purchased for GE 103 and other course activities.

In January, Prof. Michael Pleck presented a paper *Efficient Evaluation of CADD Assignments* at the mid-year meeting of the Engineering Design Graphics Division of ASEE, held in San Francisco. In a discussion at the end of the session, a majority of attendees indicated they relied solely on hardcopy output for evaluating CADD assignments for engineering graphics. Pleck's paper, which gave the sound rationale for on-screen grading and some methods to accomplish it effectively and efficiently, served to stir interest in devoting a future meeting entirely to the subject.

Prof. Manssour H. Moeinzadeh

Prof. Manssour Moeinzadeh and two of his former students, Lawrence M. Kaplar and Jeffrey A. Gurish, have received a second patent for their invention, "Semi-Disposable Surgical Stapler." The patent, US Letters Patent No. 5,188,274 was granted by the US Patent and Trademark Office on February 23, 1993. They currently are discussing licensing their patents with interested companies.

Prof. Hartley Dies

Prof. Thomas C. Hartley, 70, passed away February 17 at Carle Foundation Hospital, Urbana. A member of the GE faculty for 39 years, he retired in 1986.

Presents Paper on GE 242

During a visit to the National Science Foundation, Prof. Deborah L. Thurston described the General Engineering Department program in Senior Project Design (GE 242).

A NSF program director thought that the project was a "very well kept secret," and invited Prof. Thurston to present a paper on the course at the "Frontiers in Education" Conference co-sponsored by the American Society for Engineering Education and the Institute of Electrical and Electronics Engineers, held last fall in Nashville, TN.

The paper was co-authored by Profs. James V. Carnahan, Roland L. Ruhl and Thurston.

Modify GE 292 To Satisfy Composition Requirements

Engineering Law GE292, has been modified to meet the composition II General Education requirement.

The course which is required in the General Engineering curriculum, will now enhance the students general education by developing the student's composition skills.

This is done through assignment of one long paper and a series of short papers on different aspects of engineering law that will require library research and critical analysis of various issues.

Topics of the papers are chosen by the students to closely examine an area of law that interests them. The subjects have ranged from contracts to product liability, to computer law to intellectual property.

Bill D. Woodard, adjunct lecturer, and Dr. Mark Thomas, Department of English, are in charge of the course.

7 Faculty Members Cited As Outstanding Advisors

Seven GE faculty members received awards as outstanding advisors sponsored by Andersen Consulting Co. and selected by the College Dean's Student Advisory Committee.

Recipients were: James V. Carnahan, Wayne J. Davis, David C. O'Bryant, Michael H. Pleck, S. Daniel Thompson, Deborah L. Thurston and Thomas R. Woodley.

It was the fourth consecutive year Prof. Carnahan has won the award. He also was invited to be the featured speaker at the Advisors Award Banquet March 22 at University Inn.

Awarded Fellowship

Joseph G. Macro, Schaumburg, IL, has been awarded a prestigious U.S. Department of Energy Predoctoral Fellowship in Integrated Manufacturing. He is completing his requirements for a M.S. degree in GE under Prof. Wayne Davis and will work on his doctorate in industrial engineering with Prof. Davis.

New Building (continued from Page 1)

Two 386 PC's and a 286 PC machine are located there and are networked to a 486 server in the Robotics Laboratory where an ever-increasing store for useful software is accumulating. Also in Room 308 there is a Macintosh which is networked to the Mac Lab.

ISGE has donated \$500 for renovation of Room 308 and Prof. David Goldberg also has made a personal gift for the project.

Prof. James V. Carnahan, director of Senior Project Design, announced that the department is planning to seek alumni and business support to equip the design studio.

Alumni Notes

1947 James Marshall Palm, Rockford, IL, has announced his retirement as a consultant with Rockford Engineer Producers. His twin brother, John R., also of Rockford, is retired too.

1948 Norman Weiner is President of American Gasket and Rubber Co., Schiller Park, IL. He resides in Northbrook, IL.

1952 Clarence P. Niebow has retired as payload engineer with Boeing Commercial, Seattle, WA. Previously he was with Rockwell Intl-Aircraft operations, El Segwudo, CA. He has taken up residence in Green Valley, AR.

1956 Lawrance S. Staples, Jr. has formed his own company to serve as marketing consultant and manufacturing representative. He is located in Shawnee Mission, KS.

1960 Dennis Joseph Dulin has joined an architecture and engineering firm, The Zimmerman Design Group in Milwaukee, WI, as senior project manager. For the past 20 years he has been President of Dulin Associates, a building project management and engineering firm in DeKalb, IL. He will be residing in Lake Mills, WI.

1961 William L. Schaulin, has accepted a new position as partner in Thomas Group, Inc., a management consulting firm in Irving, TX. He will reside in Dallas, TX.

1962 John M. Tascher, MA (Science and Technology) '65, Case Institute of Technology, is a general engineer with Department of Defense, Falls Church, VA. He serves as metric coordinator for DOD to plan and coordinate conversion to the metric system. He resides in Arlington, VA.

1963 Robert A. Watson, MS (Management Science) '69, Johns Hopkins, has been named President of Xetron Corp. (subsidiary of Westinghouse Electric Corp.), Cincinnati, OH. He has just returned to the U.S. after serving in Iran, Nigeria, England and Turkey. He lives in Cincinnati.

1966 John R. Weibel, MS (Industrial Management) '76, Central, Michigan, is a quality management consultant of his own company in Peoria, IL.

1967 Brian Richard Bachman, MBA '69, U of Chicago, has been named Vice President and Group General Manager for Philips, Sunnyvale, CA. He lives in Saratoga, CA.

1969 Robert C. Shook, MBA '76, U. of Syracuse, is project leader, Carrier Corp, Arkadelphia, AK.

1972 Samuel E. Eskridge, manufacturing engineer, GE Electrical Distribution and Control, Plainville, CT, has been granted a U.S. patent for a circuit breaker handle tie for automated assembly. He currently is studying toward a MS degree in Manufacturing Systems Engineering at National Technological U.

1973 Paul Newhagen, MBA '79, U. of Santa Clara, for the past nine years has been Vice President of Finance, Altera Corp., San Jose, CA. As a hobby he climbs mountain peaks such as Mt. Shasta, Mt. Whitney and other California peaks and plans to scale Mt. Rainer in Washington.

W. Peter Siems, is a senior design engineer with Caterpillar's Large Engine Development in Lafayette, IN. He recently relocated from Peoria, IL.

1975 Roger D. Koch, has been named project engineer, Caterpillar, Inc., Peoria, IL. His responsibilities involve vehicle performance analysis of mining and construction machines. He resides in Pekin, IL.

1976 Mark S. Holecek, MAS '77, has been President of American Marketing Systems, Burr Ridge, IL. The firm produces television infomercials. Holecek resides in Hinsdale, IL.

John B. Holz, MS (GE) '81, has recently been named Director of Technical Workstation Marketing for IBM's advanced workstations and systems business, Somers, NY. He is a resident of Wilton, CT.

1977 Catherine C. Patriquen Barnard, MS '78 (Environmental Engineering), is manager of Environmental Service, Uno-ven Co., Arlington Heights, IL. She resides in St. Charles, IL.

Samuel A. Yee, MBA '83, DePaul U., has accepted a position as Vice President-Equity Manager, PPM America, Chicago. He resides in Arlington Heights.

Daniel J. Mendelson has been named President of Unitex Direct. He resides in West Bloomfield, MI.

1979 Anthony L. Bonasera has been promoted to Senior Technical Consultant-Energy Systems, AT&T Network Systems, Rolling Meadows, IL. He lives in Elgin, IL.

Salvatore V. Giacobelli has accepted a new position with United Technologies Automotive as Warranty/Reliability Manager for Wiring Systems, Dearborn, MI. He is a resident of West Bloomfield, MI.

Michael Roy Huber of Findlay, OH, is engineering project manager for DIFCO, Inc. The firm designs and manufactures specialty rail cars for the railroad and mining industries.

Ruben C. Miramontes is a gas utilization engineer with Peoples Gas, Chicago. He and his wife have announced the recent arrival of their third son.

David O. Reip was recently separated from the USAF and accepted a position as research engineer with IIT Research Institute, Virginia Technology Center. He resides in Burke, VA.

1980 Mark Daniel McFee has accepted a new position as project engineering manager, Dial Corp., St. Louis, MO. McFee, his wife and three children have moved to Collinsville, IL.

Susan Elizabeth Kenney Meredith is Director of Human Excellence, a consulting company in Strawberry Hills NSW, Australia. The firm creates games to teach seminars to organizations about momentum, leverage, 'energy flow' management and static vs. dynamic organizations.

Henry A. Neicamp has been transferred to Louisville, KY as a sales engineer, commercial/industrial lubricants department, Penzoil Products Co., Houston, TX.

1981 Jane Glemza Beck, is an engineering supervisor, Furnas Electric Co., West Chicago, IL. She resides in St. Charles, IL and gave birth to a daughter in November.

Harry D. Daniels, Urbandale, IA, is a plant manager, International Valve Corp., Des Moines, IA.

Kathy Jones Koniarski, MBA '90, has been appointed senior associate, Construction Services Group, Coopers and Lybrand, Chicago, IL. She resides in Evanston, IL.

1982 Martha L. Anderson-White has taken a new position as account executive, Technengineering Services, Inc., Indianapolis. She was married on September 12, 1992 to Robert J. White.

Steven M. Hands, MS (Management) Northwestern, has been appointed Region Manager, Mark Controls Corp., Skokie, IL. He now resides in Park Ridge, IL.

Gregory Reynolds, PE, MS (engineering) '86, U. Dayton, MBA '88, UI, is employed in Features and Planning, Ford Motor Corp., Dearborn, MI. A resident of Saline, MI, he was recently elected President of Greater Detroit UI Alumni Assoc. He also is active in the Air Force Reserves serving as a Captain, Wright Laboratories Plans and Program Directorate.

1983 Samuel G. Papandreas, DDS'87, Loyola, MS'89, Baylor, has established a corporation in Cleveland, OH. In addition to providing orthodontic care he develops and tests new products, materials and techniques.

1984 Timothy L. Bailey, St. Louis, MO, MBA'92, Washington U., is regional facilities manager, Centermark Properties, Inc., St. Louis, MO.

Toni Tegtmeier Baumann, MBA'91, Keller School of Management, has been promoted to National Support Specialist, John Fluke Mfg. Co., Palatine, IL. She is responsible for distributor support and marketing efforts. She resides in Carpentersville, IL.

Ronald J. Borre, MS (GE)'91, is a design engineer, Allison Gas Turbine Div., GM Corp., Indianapolis, IN. He has received a US patent for a secondary oil system now used in the US Army's T800 Turboshift engine.

1985 Eric Wayne Hintz passed away December 17, 1992 at Long Beach Community Hospital, CA. He was a pre-med student at Long Beach University.

1986 Mark A. Krull, Woodbury, MN, JD'89, U. of Texas, has left his position as intellectual property counsel for NordicTrack, Inc. to form the law firm of Johnson & Krull in St. Paul, MN specializing in patent, trademark, and copy-right matters.

Michael S. Rickey is a design engineer for Caterpillar, Inc., Decatur. He is announcing the birth of a second son. He resides in Latham, IL.

Andrew W. Sigle, Chicago, IL is MTS with AT&T/Bell Laboratories, Naperville, IL. He is studying towards a MBA at the University of Chicago.

1987 Julie Furmanek Jewell, MS'92, has been named Developer in the MACPAC for the AS/400 Group of Andersen Consulting, Chicago. She returned to Andersen's after a year as a Systems Engineer at Integrated Controls and Computer Systems in Champaign. She now resides in Palatine, IL.

Daniel L. Grill, JD'92, Widener U, is a member of German, Gallagher and Murtagh, Philadelphia, PA. The firm concentrates on defense of product liability and medical malpractice claims. He is a resident of Havertown, PA.

Sharon Louie-Ohlson has accepted a position as New Sales Account Representative, Otis Elevator Co., San Francisco, CA.

Mary Sims Vonck, MBA'92, U. of MI, has been promoted to Senior Sales Engineer, York International, Troy, MI. She resides in Grand Rapids, MI.

Neil T. Wilkie, M. Eng. Adm'92, Virginia Polytechnic Inst., is a project engineer, PAC-FAB, Inc., Sanford, NC.

Laura A. Hoffman Anderson, Elk Grove Village, IL has been promoted to New Product Development Manager, ITW Deltar, Frankfort, IL.

Eric P. Hedlund has accepted a position as manufacturing engineer, Schlage Lock, Security, Co. after completing Ingersoll-Rand's Manufacturing Management Training Program. He resides in Colorado Springs, CO.

Jacquelyn Beller McGroarty, MS (GE)'90, is a clinical information specialist, RW Johnson Pharmaceutical Research Institute, Raritan, NJ. She lives in Lebanon, NJ.

Anthony L. Schaff, Fort Worth, TX, has been named RED engineer with Alcon Laboratories, Ft. Worth.

1988 Shelly K. Morgan, MS(GE)'91, has accepted a position of staff engineer, Diamond-Star Motors Corp., Normal, IL.

Therese Villegas, an engineer with GM-Packard Electric, has been transferred from Laredo, TX to Berkley, MI.

Jama L. Thurman, is an engineer with the U.S. Department of Energy, Washington, D.C. She resides in Falls Church, VA.

1989 George B. Dowse, Eden Prairie, MN, is a sales engineer with Minneapolis Project Construction Market, General Electric, Electrical Distribution and Control Division, Minneapolis. He is studying toward a MBA at the University of Minnesota.

Michael C. Duda is lead engineer, Cellular Switching Systems, Motorola, Arlington Heights, IL. He is a resident of Naperville, IL.

Brian Phillip Emery, MS (Env. Eng)'93, returned to UIUC to complete work on his master's degree after two and a half years with Caterpillar, Inc., as an industrial engineer. He had an appointment as a research assistant with CERL.

Andrew Finko, JD'92, John Marshall Law School, has been named associate attorney with Rosenberg and Opdycke, Chicago, IL.

J. Peter Kelso, Chicago, IL, is a full-time student at U. of Chicago and will receive a MBA in June. He is concentrating in finance, quality management and production management.

Shelia J. Marion Kimlinger, MS(CE)'91, Monticello, IL, is a staff engineer with Frauenhoffer and Associates, Champaign.

Gregory M. Vydra, MS (Indus. Eng) '90, Northwestern has been named a consultant with Zs Associates, Evanston, IL. He is a resident of Wheeling, IL.

1990 **Dean A. Brusnighan**, MS'90, is rural assistive technology specialist, Purdue U., W. Lafayette, IN. He, his wife, and their new baby daughter reside in Dayton, IN.

Erick L. Duncan has accepted employment as an industrial engineer for an electric lift and truck line, Hyster-Yale Material Handling, Danville, IL.

Daniel M. Hora, Hinsdale, IL, has been named Technical Sales Representative, Ono Sokki Technology, Inc., Addison, IL.

Mark Alan Rashke, MS'92, has been appointed Product Design Engineer, Cummins Engine Co., Inc., Columbus, IN.

Jay A. Saltzman, JD'93, U. of MI, is an associate in the patent law firm, Fitch, Even, Tabin and Flannery, Chicago. He lives in Northbrook, IL.

John T. Stadler, Aurora, IL, is a design engineer, V. L. Meece Engineering, Inc., Coal City, IL.

Julie Ann Upper has been promoted to Plant Level Project Engineer, Exxon Chemical, Baton Rouge, LA.

John D. Whittenbarger, Seattle, WA is employed as a territorial sales manager, Industrial Products Division, Goodyear Tire and Rubber Co.

1991 **Dan J. Block** is Associate Test Equipment Engineer, IBM, Poughkeepsie, NY. He is a resident of Wappingers Falls, NY.

David Lee Demeny, Streamwood, IL, has accepted a position as project engineer, Pro Tech Plastics, Inc., West Chicago, IL.

Brian C. Gile is Systems Engineer, ICCS, Savoy, IL.

Bruce R. Sattley has been employed as Engineering Systems Engineer, Unigraphs CAD/CAM Division, Troy, MI after completing a two-year training program.

Jennifer L. Schaulin has a new position as Diagnostic Imaging Sales Representative, GE Medical Systems, Seattle, WA.

Steven P. Seaney, MS(ME)'93, U. WI (Madison) has been hired as Research Assistant, Powerton Research Laboratory, U. of WI, Madison, WI. He currently is enrolled in graduate studies.

Bryan D. Smith, Chandler, TX, is a project engineer, Morton International, Salt Group, Grand Saline, TX.

Cindy Diane Stimbert has been transferred as a quality engineer, Osteo-technology International, Inc., to Timonium, MD from Manhattan, NY.

Rebecca Anne Studebaker, has been named a civil engineer, Department of Highways, Illinois Department of Transportation, Dixon, IL.

1992 **Jeffrey M. Cortez** is a project engineer, Lyon Metal Products, Aurora, IL.

John Robert Kerr is a program assistant, Association for International Practical Training, an international reciprocal exchange organization, Columbia, MD.

Christine A. Mondragon has been hired as an environmental protection engineer, Illinois Environmental Protection Agency, Collinsville, IL.

Tara L. Winslow Morr is a design engineer, Caterpillar, Inc., Decatur, IL.

Robert L. Newton has accepted a new position as Cable Quote Coordinator, The Phoenix Co. of Chicago, Wood Dale, IL.

Robert W. Evans, Editor
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