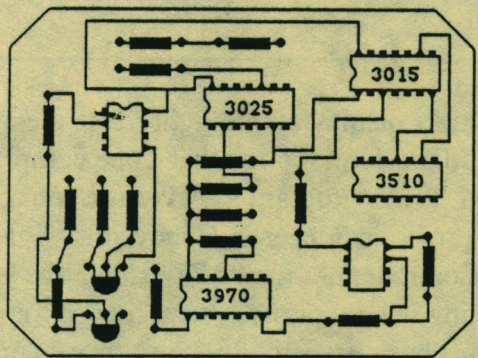


03/05/90

CpE Circuit Board

A newsletter of the
Department of Computer Engineering
University of Minnesota - Duluth



Vol. IV, No. 1

Fall 1989

Editor: Linda Schwartz

Cherokee Anderson
UMD Library Archives

CPE ACCREDITED—The Department of Computer Engineering has earned national accreditation by the Accreditation Board for Engineering and Technology, Inc. “We are very pleased by this action,” states Nazmi Shehadeh, professor and department head, “because it verifies that we offer a program to undergraduates that meets and in many cases surpasses the standards set by engineering professionals. Our graduates will find employment that much easier, and we hope to attract major financial support from industry as the word of our accreditation spreads.”

CPE ATTRACTS STUDENTS—The computer engineering program at UMD continues to grow. This fall a total of 172 students are enrolled in the program.

AROUND THE DEPARTMENT—A series of seminars is in progress and will continue throughout fall quarter in conjunction with CpE 3980: Senior Seminar. On Sept. 14, **Marvin Bausman**, senior photonics engineer with Cray Research, presented a well-received seminar entitled “Supercomputers: A Perspective from Cray Research.” **David Gross**, chief executive officer from Management Consulting Associates, spoke on “Computer Architectures for Electric Power System Control and Data Acquisition” on Oct. 5, and **Hank Dinter** from Honeywell, Inc. spoke on “Inertial Navigation and the Ring Laser Gyro,” on Oct. 12. Other speakers in the series include **William Hamer** of ADC Telecommunications (Oct. 26); and **Paul Huang**, FMC Corp. (Nov. 9). Stop by the department office for more information.

CPE 3970, 3971—Senior Project I and II

grading options have been changed from Pass-No Pass to A-F effective Summer Session I, 1989. Senior project courses that are pending from previous registrations (prior to SSI 1989) will be graded by the Pass-No Pass grading option.

FACULTY LAB COORDINATOR NAMED—Beginning fall quarter, **Chris Carroll** will oversee undergraduate labs and coordinate the purchase of equipment and parts. If you have questions, needs, or problems in the labs, please see Dr. Carroll (MWAH 252).

DIGITAL LOCKS INSTALLED—Labs in 102, 355, and 420 MWAH now have digital locks requiring special access codes. The codes will be changed each quarter and are available in the CpE office to *CpE students only*.

SUMMER LAB ASSISTANTS—**Kirk Johnson** and **Tom Stromquist** worked this summer counting parts and components, arranging and setting up labs, and generally helping the department prepare the labs for the 1989-90 academic year.

CPE RECEIVES DONATION—**John Fluke, Inc.** donated \$18,000 to be used in purchasing undergraduate laboratory equipment from their firm. Thanks to Fluke for their continued support of our program.

VIRUS SAFETY—The outbreak of computer viruses on campus last year drives home the old adage: “An ounce of prevention is worth a pound of cure.” Some virus prevention tips: 1. Never use a lab computer that has been left on. Turn it off, wait 30 to 60 seconds, then turn

back on. 2. Write-protect your disks whenever possible. 3. Always make backups of everything important; *never* use the original copy of programs—use copies. 4. Use extreme caution when using unknown programs and/or software that does not come from a totally unimpeachable source. This is even more crucial on a system with a hard disk. If you suspect a viral contamination on any of the computers in the labs, talk to Chris Carroll. Virus detection programs are available in the Information Services Office to students who wish to check their disks for infections. (Tips taken from *Engineers' Forum*, Virginia Tech, April 1989.)

SUMMER INTERNSHIPS—Although not a curriculum requirement, the department strongly encourages CpE students to work as engineering interns at some point in their undergraduate careers; perspective employers look for practical laboratory experience in potential employees. Applications for summer usually are made after Dec. 1 and before Jan. 31. Look for postings on the bulletin board outside of 279 MWAH, or talk to Linda Schwartz (189C MWAH) for possibilities. Also, CpE graduates: Please be alert to internship/employment opportunities for our students with your firms. Contact the department when positions open.

NEWS FROM GRADUATES—We are always pleasantly surprised when former students stop by the department to chat. In June, **Richard Coan** (Fall '88) stopped by while on vacation here in Minnesota from Phoenix. Says Richard, "I was glad to see rain even if it did prevent me from doing as much fishing as I wanted!" Employed by Honeywell's Air Transport Systems Division in FMS Engineering, Richard says he is pleased with his position, and likes everything about Phoenix except the heat. Also from Phoenix, **John McGregor** (Winter '87) came to the office in September. John confirms that he and **Tone Carlson** (Fall '86) were married on New Year's Eve, 1988 in Norway. "The reception was held 900 feet above Oslo. The view was fantastic and the

fireworks display at midnight made the night," says John. John reports that Tone completed her M.S.E.E. program at Arizona State and is now project engineer in Honeywell's Business and Commuter Avionics Division. She is working on autopilots system design for use in various business jets. John is a project engineer in the Sperry Commercial Flight Systems Division of Honeywell where he is working on hardware design for the new A340 Airbus plane. In a note from **Lee Simmonds** (Winter '87), we were informed that he has been promoted to Electronics Systems Engineer with E-Systems in Texas. In that capacity he is head engineer for two projects.

1989 GRADUATES UPDATE—The U.S. map that is the backdrop for our display case entitled *CpE Graduates: Who We Are. What We Do* is filling out as we add the names, firms, and locations of our growing list of alumni who are finding engineering employment around the country. The CpE Phoenix Connection continues to grow. **Bryan Fisel** joined Honeywell's Commercial Flight Systems Group in Phoenix as Software Advanced Technology Engineer. He is working on the cockpit design for the McDonnell Douglas 11, earmarked to replace the DC 10. **Patrick Jones** reports that the *real* studying begins on the job, after graduation. He says he is enjoying his challenging position as Communications Planner in the Command and Control Group at Ford Aerospace, San Jose, CA. Congratulations to **Don Kozlovski** and wife Lisa on the birth of a son this Sept. 21. Don says E-Systems (Greenville, TX) is currently expanding and is hiring EE/CpEs who have had good internship experiences. (Contact Don through the CpE office.) **Bryce Ofstie**, engineer with Minnesota Power, recently passed his E.I.T. **Jim Pappin** is enjoying work as project engineer with Kim Controls Systems Group in Minneapolis where he is currently designing controls using I/O modules for systems like conveyors. **Myron Schlueter** works as control systems engineer at Hanscom Air Force Base in Boston. **Scott Skibness** is an

applications engineer working in systems setup at North Central Satellite Antenna Systems in Minneapolis. **Gary Vinneau** is employed as a civilian engineer in the Army Satellite System Division at Fort Huachaca, near Sierra Vista, AZ. **Jeff Vitullo** joined Lockheed's engineering team in California. **Albert Wong** is a design engineer with Motion Research, Inc. in Plymouth, MN. Just as I'm writing this **Pete Malecha** calls with news that he begins work Oct. 23 with Electronic Data Systems (EDS), a General Motors subsidiary in Troy, Michigan. After attending a two-week training program in Dallas, Pete will be working in the Developmental Engineering Systems Division where some of his engineering duties will include integrating computer and CAD systems. Congratulations to all of you. Let us know of any changes in your lives—exciting projects, address changes, news.

FACULTY HAPPENINGS—Minnesota Power awarded a \$5,000 gift to **Chris Carroll** and **Taek Kwon** to support the design and development of an instrument to precisely measure the speed of rotating shafts. Taek has also submitted a paper entitled "Improvements on MAXNET: Synchronization and Maxima Problems" to the 10th International Conference on Pattern Recognition.

Ken Crompton, assistant professor, attended the American Society for Engineering Education (ASEE) Annual Conference held June 25-29 in Lincoln, NE.

Douglas Miller, associate professor, has written articles entitled "A Semantic Network for Optoelectronic Cognition," and "Semantic Petri Networks and Industrial Organization." Dr. Miller is also developing a new elective course in parallel computing.

Nazmi Shehadeh, professor and head, received a University Faculty Grant from the NEC Information Industry Faculty Committee to attend the National Communications Forum held in Chicago Oct. 2-4.

The Computer Science Department at UMD has published a technical paper by **Clark Thomborson**, professor, (with James Fenno) entitled "When is a Cray-2 No Better than a Workstation?" Clark's research is cosponsored by the NSF Design, Tools and Test Program and the Minnesota Supercomputer Institute.

Jiann-Shiou Yang, assistant professor, will present a paper (with William Levine) entitled "Digital Controller Design for the Pitch Axis of the F-14 Using an H^∞ Method" at the 1989 IEEE Conference on Decision and Control to be held December 13-15 in Tampa.

CPE FACULTY CHANGES—Aly Ahmed Farag is a new instructor in the department this fall. Aly is a Ph.D. candidate in electrical engineering at Purdue University. His research interests include communication theory, multi-dimensional signal processing, and computer vision. Aly was born in Egypt where he attended Cairo University and studied biomedical and electrical engineering. He received a master's degree in biomedical engineering from Ohio State University, and a master's degree in communication engineering from the University of Michigan. Aly is married and the father of two children. What does he like about northern Minnesota? "I like ARCO coffee, Lake Superior trout, and I'm impressed by the number of blonde people living in Duluth. I also appreciate the kindness and hospitality of faculty and staff in the department. They have made the move much less stressful for me and my family." In addition to his teaching and research, which he describes as his favorite hobbies, Aly likes to play soccer, lift weights, jog, and swim. He also is a good boxer and an authority on Middle Eastern cultures, history, geography, and politics. Welcome to Duluth, Aly and family!

Ali Reza Delavari left the department in August to become associate professor in the School of Industry and Technology at the University of Wisconsin-Stout.

CPE STUDENTS EARN SA AWARDS—

Last spring, three 1989 CpE graduates earned awards at the UMD Student Association annual awards program. **Scott Skibness** was one of four UMD students selected as a **Sieur DuLuht Award** recipient. This award is given for exemplary service of three years or more to the University and community. Two CpE grads, **Patrick Jones** and **Myron Schlueter**, were among 12 recipients of the **Bulldog Award** which is presented to students who have served in at least one area where service has affected the university community from Spring 1988 to Spring 1989. Congratulations Scott, Myron, and Patrick.

SPRING QUARTER DEAN'S LIST—The following CpE students achieved academic excellence during spring quarter 1989: **Alam Salim, Duane Bourget, Kevin Dehmer, Ghada Elzoghbi, Russell Gensing, Paul Gutormson, Richard Harding, Robert Neff, Thomas Schaefer, David Weinzierl, Albert Wong.** Great work!

ENGINEERING BANQUET HELD—The first annual UMD Engineering Banquet, held Oct. 5, honored engineering students receiving scholarship awards. The guest speaker, **Charles Denny**, Chairman and CEO of ADC Telecommunications in Minneapolis, spoke on "Business and Education—A Symbiotic Relationship." The scholarship program is a joint effort of regional businesses and industries and UMD to recognize academic excellence and leadership skills in UMD students. Thanks to all businesses and organizations for their generous support of our engineering students.

SCHOLARSHIPS ANNOUNCED—Congratulations to the following computer engineering students who received scholarship awards at the UMD Engineering Banquet on Oct. 5:

- Minnesota Power Leadership Award—**Kirk Johnson.**
- Engineering Scholarships—**Thomas Schaefer; Ghada Elzoghbi; Brent Carlson;**

Robert Neff; Paul Lundgren.

- ADC Telecommunications/Johnson Academic Scholarship—**Stephen McMillan.**
- Johnson Scholarship—**David Weinzierl.**
- Marchetti Scholarship—**Scott Fawcett.**
- Tseng Scholarship—**Brian Hamilton.**

In addition to the above scholarship awards, the IEEE Computer Society Richard E. Merwin Scholarship has been awarded to **Scott Fawcett**, CpE senior.

IEEE EVENTS—The student branch chapter of the IEEE Computer Society will hold its annual election of officers in November. Watch the bulletin board for information. The second edition of the *Resume Book* was completed in October and is being distributed to personnel directors of firms likely to be interested in computer engineering graduates. Officers have begun planning for a spring Student Professional Awareness Conference (S-PAC). Students interested in helping with this important event should talk to **Kirk Johnson**, chair, or **Scott Fawcett**, vice chair.

DATES TO REMEMBER—Students are strongly encouraged to take the Engineer-in-Training (E.I.T.) and the Graduate Record Exam (GRE) before graduation. Whether you are thinking of graduate school for next year or not, take both the E.I.T. and the GRE during your senior year while course work is fresh; test scores for the GRE are valid for five years. Information booklets for both exams are available in 271 MWAH.

