

# NEWS

SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING



## *In Loving Remembrance of Demetrius T. Paris*

Georgia Institute of Technology and the School of Electrical and Computer Engineering (ECE) at Georgia Tech lost one of their true pillars of strength and determination when Demetrius T. Paris, professor and former vice president for research and graduate programs, died of a cerebral hemorrhage on Saturday, August 29, 1998. He was 69 years old.

“Demetrius was a man of integrity, intellect, vision, and enduring dedication who turned an ordinary school into something extraordinary,” said Roger P. Webb, ECE chair. “When I think of him, I think of his integrity in all areas of his life and his passion for his family and his work. He will be sorely missed.”

Born in Stavroupolis, Greece, on September 27, 1928, Dr. Paris emigrated to the U.S. in 1947, to attend college at Mississippi State University, where he received his bachelor’s degree in electrical engineering. From 1952-1958, he worked with Westinghouse Electric Corporation and Lockheed-Georgia Company. While working fulltime, Dr. Paris earned his master’s degree from Georgia Tech in 1958.

In 1959, he joined the Georgia Tech School of Electrical Engineering (now ECE) faculty and simultaneously pursued his doctorate, which he earned in 1962. During his career, Dr. Paris made primary technical contributions to the areas of antennas and antenna measurements, including the classic textbook, *Basic Electromagnetic Theory*.

As the School’s director from 1969-1989, Dr. Paris hired 63 tenure-track faculty, 46 of whom are still active today. He led the School’s transition from a regional undergraduate teaching institution to a major national resource, both for undergraduate and graduate teaching and for relevant, high quality research that involves both government and industry. Establishing the Microelectronics Research Center and the graduate co-op program are among the many hallmarks of Dr. Paris’ long and fruitful career.

“Through these [research] programs, the School rose from a budget of a few hundred thousand dollars to a multimillion dollar budget,” said Dr. A.P. Sakis Meliopoulos, an ECE professor and long-

time friend of Dr. Paris’. “It was a very dramatic increase.”

“Georgia Tech was his life,” said Dr. Meliopoulos. “He was a very dedicated person who would do anything to inspire people and lead them to success.”

From 1989-1995, Dr. Paris served as the Institute’s vice president for research and graduate programs, where he coordinated activities among academic units, interdisciplinary centers, GTRI, industry, and government agencies. In 1995, he returned to ECE as research programs coordinator, a position in which his years of expertise and knowledge were put to excellent use and were highly valued.

Dr. Paris served on the Accreditation Board for Engineering and Technology (ABET), most recently as the chair of its international activities committee, and from 1989-1995 on its board of directors. A Fellow of both the Institute of Electrical and Electronics Engineers (IEEE) and ABET, he was recently chosen to receive the Meritorious Award for Accreditation Activities from the IEEE Educational Activities Board.

Dr. Paris’ parents were the late Theodore and Aspasia Paraskevopoulos, of Drama, Greece. He is survived by his wife of 46 years, Elsie Edwards Paris of Atlanta; a daughter, Cheryl Dorsett Thompson, and son-in-law, Clifford Thompson, both of Jackson, MS; a son, James Ola Dorsett, and daughter-in-law, Becky Dorsett, both of Marietta, GA; and six grand-children, Edward Charles Thompson, James Clifford Thompson, Benjamin Paris Thompson, Nan Elisabeth Thompson, David Edwards Dorsett, and Samuel Bailey Dorsett. Funeral services were held on August 31 at the Greek Orthodox Cathedral of the Annunciation in Atlanta. •



*Demetrius T. Paris  
1928-1998*

*“His [Dr. Paris’] accomplishments in his chosen field are nothing less than overwhelming. His dedication to Georgia Tech is heartwarming.”*

– J. M. Crawford ’35

## From the Chair *Demetrius Paris - Eulogy*



*Roger P. Webb  
ECE Chair*

**D**emetrius Paris was a good and lovely man—a man of integrity—a man of immense intellect—a man of vision and enduring dedication—a man who made a difference. Demetrius had two abiding passions, his family and his work. He and Elsie raised two fine children, Cheryl and Jimmie, of whom Demetrius was intensely proud—as he was of their children. For Demetrius, there was no Demetrius without Elsie.

For 40 years, Demetrius dedicated his professional life to Georgia Tech—a place he held dear. During his 20 years as director of the School of Electrical Engineering, his vision, his passion, and his focused attention to intrinsic elements and first principles transformed the School from something quite ordinary to something truly extraordinary. After several years serving the Institute as vice president for research and graduate programs, Demetrius returned to the School and dedicated himself to the work he loved best—assisting younger faculty in the development of their careers. It is entirely fitting that the Demetrius T. Paris Young Faculty Endowment has been established to perpetuate his work.

More than anyone I know, Demetrius was a man for whom everything was derived from first principles. To know this, to know him, one must only read his textbook, a classic text, a book that reveals the soul of the man as much as if it were an autobiography. Demetrius had immense sensitivity to others—a sensitivity which frequently got him into conflict with himself—conflict he always resolved based on his first principle in dealing with people—personal integrity. Whenever I think of Demetrius, the corollary word is integrity. He set the standard.

Demetrius worked up to the day of his stroke. He “died with his boots on.” I believe he would have wanted it so. Demetrius Paris—a good and lovely man who will be sorely missed. •



*Advisory Board members—past and present established the Demetrius T. Paris Junior Faculty Endowment Fund last spring to commemorate Dr. Paris' outstanding service to the Tech community. This endowment will support outstanding young faculty members in ECE. (l-r) Roger Webb, ECE chair; Dean Alford, ECE Advisory Board chair; Demetrius Paris; his wife, Elsie Paris; and Jean-Lou Chameau, dean, College of Engineering.*



*For those people who wish to remember Dr. Paris, the family requests that donations be made to the Demetrius T. Paris Junior Faculty Endowment Fund, in care of the Georgia Tech Foundation, Atlanta, GA 30332-0182.*

## Georgia Tech Engineering Programs to Expand

Plans are underway for Georgia Tech's College of Engineering (CoE) to launch the Georgia Institute of Technology Regional Engineering Program (GT-REP) in southeastern Georgia in the fall of 1999. In addition, the Institute plans to expand its distance learning and continuing education programs in engineering.

According to CoE Dean Jean-Lou Chameau, two undergraduate degree programs will be offered at the outset of the GT-REP: one in computer systems engineering, to be led by Acting Program Coordinator Joseph L.A. Hughes, an associate professor and vice chair in ECE, and the other in civil engineering, to be led by David Frost, associate professor in Georgia Tech's School of Civil and Environmental Engineering and acting director of GT-REP. Master's degree offerings in Georgia Tech's distance learning program will also be expanded to complement these GT-REP undergraduate degree options.



*ECE News is published by the School of Electrical and Computer Engineering.*

Editor: Harry Vann  
Editorial Staff: Suzy Briggs, Jackie Nemeth, and Gail Palmer  
Designer: Diana Fouts  
Email: [info@ece.gatech.edu](mailto:info@ece.gatech.edu)  
URL: <http://www.ece.gatech.edu>



## Cadence Gift Enhances School's Design Capabilities

Cadence Design Systems, the world's leading provider of electronic design software, has donated 450 software bundles valued at \$4.4 million to ECE. This gift includes licenses of the Custom Integrated Circuit Design Bundle, Logic Design and Verification Bundle, Deep Submicron Design Bundle, Performance Engineering Bundle, Alta SPW Bundle, and Alta BONEs Bundle.

"Cadence is happy to partner with the School of Electrical and Computer Engineering by providing electronic design automation tools that will assist students to develop the skills and expertise to meet the ever changing design challenges of today and the future. When industry and education envision the possibilities of mutually beneficial relationships and make them a reality through a strong curriculum impact initiative such as this, we create partnerships for success for industry, education, and our community," said Thaddeus Salter, manager of University Relations and Recruiting for Cadence.

"We are very fortunate to have the support of a forward-looking company such as Cadence. This software donation will enable our students to gain practical engineering experience with a state-of-the-art suite of design tools. As systems become significantly more complex, such exposure is increasingly important if our students are to remain at the forefront of the profession," said Dr. David E. Schimmel, ECE associate professor. •

*"These gifts from Cadence and Altera will greatly impact the School's process of educational delivery by providing hands-on experience to students within the classroom environment."*

*—Roger Webb, ECE chair*



*Over 200 students per quarter gain their first hands-on digital experience using state-of-the-art equipment. They are now able to verify their designs using logic analyzers, oscilloscopes, and high-end CAD workstations.*

## Altera Supports ECE CAD Laboratory

Altera Corporation has provided the School with more than 250 sets of software valued at \$1.78 million. The Altera Max+PLUS II CAD tools enable students to design, simulate, and implement digital logic and computer designs on complex programmable logic devices (CPLDs). Support is included for schematic capture, VHDL, and Verilog logic synthesis. Each student can check out or purchase a low cost CPLD board with an equivalent of 20,000 digital logic gates. The Altera CAD tools automatically implement their designs in hardware in a CPLD. The CPLD board is programmed via a PC's printer port.

"Altera is proud to supply this important technology to Georgia Tech," said Joe Hanson, Altera's University Program manager. "With this donation, talented engineering students will gain direct, hands-on experience designing with state-of-the-art computer aided engineering tools and programmable logic devices—skills that translate into substantial advantages for the highly competitive, knowledge-intensive fields of telecommunications, data communications, computer peripherals, and industrial applications design."

Altera has already seen a positive impact of the donation with increased name recognition by students. The number of Georgia Tech students interviewing with Altera this fall increased by more than 300 percent.

"Altera's donation will enable our students to use state-of-the-art professional CAD tools in computer engineering courses," said James O. Hamblen, ECE associate professor. "Any of our more than 200 PCs can now run the commercial CAD tools via a network license server. For student-owned PCs, Altera has also donated more than 500 CDROMs with a student version of the CAD tools. This will enable us to keep our digital and computer laboratory assignments at the leading edge of technology."

# Scientific-Atlanta and ECE to Study Digital CATV Issues

## ADVISORY BOARD MEMBERS 1997-98

- Antonio R. Alvarez** '78, '79  
Cypress Semiconductor
- C. Dean Alford\*** '76  
Allied Utility Network
- Michael B. Bartlett** '76  
Texas Instruments
- Michael J. Buckler** '71, '71  
Lucent Technologies
- James R. Carreker** '69  
Aspect Telecommunications
- Steve W. Chaddick** '74, '82  
CIENA Corporation
- Michael A. Coleman** '82  
Coleman Technologies, Inc.
- H. Allen Ecker** '57, '59  
Scientific-Atlanta, Inc.
- R.M.G. Frame**  
NorTel
- Michael R. McQuade** '80  
E.I. duPont de Nemours
- Shirley Mewborn** '56  
Southern Engineering Company
- E. Jock Ochiltree\*\*** '70  
ISD, Inc.
- Randall E. Poliner** '77  
Antares Capital Corporation
- John W. Pope** '69, '70  
Southern Company Services
- Richard A. Snelling**  
VSI, Inc.
- C. Meade Sutterfield** '72  
SSPCS Corporation

\*Chair  
\*\*New Members

Scientific-Atlanta has donated the equipment to ECE for a two-way digital CATV communications research laboratory. The Scientific-Atlanta system, which consists of a satellite antenna and digital receivers, digital network control system, broadband integrated gateway, head-end QSPK and QAM modulators, DAVIC controller, and several explorer digital home communications terminals with facilities for software development, is located in the GCATT Building. In addition to the equipment donation, Scientific-Atlanta will contribute \$50,000 a year for the next three years to fund coordinated research projects. Scientific-Atlanta has also agreed to double its support of contributions to the Georgia Tech Capital Campaign made by Georgia Tech alumni who are Scientific-Atlanta employees for the same time period. These funds will assist in the continued maintenance of the lab and continued support of graduate students. The research program and supporting gifts were announced at a breakfast hosted by Scientific-Atlanta for Georgia Tech alumni working for the company.

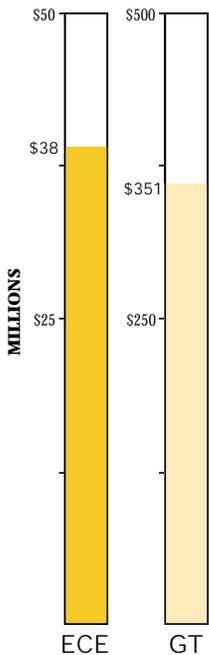
"Scientific-Atlanta is very enthusiastic about our new collaborative research program with



(l-r) Roger Webb, ECE chair; H. Allen Ecker, president, subscriber networks sector, Scientific-Atlanta; Burchall Cooper, vice president engineering-DSN, Scientific-Atlanta; John Copeland, Weitnauer Chair Professor.

Georgia Tech," said H. Allen Ecker, president, subscriber networks sector of Scientific-Atlanta. "We believe that the combination of an equipment donation of a digital interactive network platform and monetary contributions to support research will make a dramatic impact on the way entertainment, information, and communication are delivered to consumers in the home through broadband networks," Dr. Ecker said. •

## Capital Campaign



## Georgia Tech Wireless Institute Moving Forward

Founded in April 1998, the Georgia Tech Wireless Institute (GTWI) is a consortium of 25 faculty members predominantly from ECE and a few key personnel from the College of Computing (CoC).

Led by Nikil S. Jayant, John Pippin Chair in Wireless Systems and Georgia Research Alliance Eminent Scholar, GTWI provides a forum in which these faculty members can interact with each other and with industry leaders in wireless communications. In turn, the Institute gives member companies improved access to many well qualified students who want to pursue careers in this dynamic field.

Key areas of interest among ECE and CoC faculty members and students include electronic devices; RF circuit design; integrated architectures

and advanced packaging; antennas; databases; security; mobile computing; and algorithms for digital signal processing, communications, and networking.

GTWI's yearly activities include bi-annual research reviews given by faculty and students; access to student biographical information; visits by one or more of the GTWI faculty to member companies; access to all technical publications, including MS and PhD theses; and opportunities to provide direction for future GTWI activities.

For more technical information about GTWI, contact Dr. Jayant at 404.894.7285 or David R. Hertling at 404.894.2932 or visit <http://www.ece.gatech.edu/research/rf/GTWI.html>. To join GTWI, contact Harry Vann at 404.894.4025. •



# Smith and Jayant Selected as John Pippin Chairs in ECE

ECE has named Glenn S. Smith the John Pippin Chair in Electromagnetics and Nikil S. Jayant as the John Pippin Chair in Wireless Systems and Georgia Research Alliance (GRA) Eminent Scholar.

"We are fortunate and pleased to have added two such distinguished faculty members, bringing our total number of chaired professors to 12," said Roger P. Webb, ECE chair. "Glenn Smith is a truly outstanding scholar, and we are pleased that one of our own emerged from a national search. The Pippin Chair is a fitting recognition of his excellence. Nikil Jayant joins us after an outstanding career of 30 years at Bell Labs/Lucent. We are pleased to have a person of Nikil's professional stature to provide leadership in our growing educational and research endeavors in wireless systems," said Dr. Webb.

Both professorships are supported by an endowment provided in 1997 by John E. Pippin, chair of the board (emeritus) of Electromagnetics Sciences, Inc. (EMS). Dr. Pippin, a BEE '51, MS '53 graduate of Georgia Tech, co-founded EMS which, in 1971, was the first firm to locate in Technology Park/Atlanta.

In deciding to fund these positions, Dr. Pippin reflected on the significant and positive impact that Georgia Tech has had on his life and career. "Electromagnetics and its applications are quite central to electrical engineering applications and will be for many years to come," said Dr. Pippin. "I expect that these chaired professors will lead the effort in ECE to produce top students and to provide high quality educational and research programs."

An ECE faculty member since 1975, Dr. Smith also serves as a Regents' Professor and chair of the School's electromagnetics technical interest group. His efforts have been divided between teaching and sponsored research projects focusing on electrically small antennas, electromagnetic properties of plasma exhaust plumes, development of miniature electric field probes, coupling of electromagnetic energy to nerve fibers, design of millimeter-wave antennas, pulsed antennas, and ground penetrating radars.

Dr. Smith was recently elected by the IEEE Antennas and Propagation Society (APS) membership to serve on the Society's Administrative Committee. The author of the recently published textbook, *An Introduction to Classical Electromagnetic Radiation*, Dr. Smith is a Fellow of the IEEE and associate editor of the *IEEE Transactions on Electromagnetic Compatibility*.

In addition to his chair and GRA positions, Dr. Jayant will also serve as director of the Georgia Tech Wireless Institute, a newly initiated consortium composed of 25 ECE faculty members, their students, and participating member companies. Prior to coming to ECE, Dr. Jayant served as director of multimedia at Bell Labs. His personal research is in the field of digital coding and transmission of information signals. An author of 100 papers and several books and the holder of 20 patents, Dr. Jayant is an IEEE Fellow and a member of the National Academy of Engineering.

ECE is one of the largest producers of electrical and computer engineering graduates in the U.S. In 1997-1998, the majority of these graduates chose course options from the Georgia Tech Wireless Institute's five major thrust areas—RF electronics, wireless communications, electromagnetics, digital signal processing, and devices. •

*ECE hosted "Telecommunications: The Future Is Here," a panel discussion moderated by C. Meade Sutterfield (far right), president of SSPCS Corporation, during Homecoming Weekend, October 16, 1998. Participants included (l-r) Steve W. Chaddick, senior vice president of strategy and corporate development at CIENA Corporation; Alex B. Best, senior vice president of engineering at Cox Communications, Inc.; Nikil Jayant, John Pippin Chair in Wireless Systems and GRA Eminent Scholar; and John A. Lamb, senior vice president of strategic product marketing at Melita International. Members of the panel discussed a variety of topics such as maximizing uses of the Internet and mixed media applications, making software and technology more user friendly, and addressing challenges in the areas of multimedia messaging, wireless communications, broadband telecommunications, and videotelephony.*



## COLLEGE OF ENGINEERING AWARDS

The College of Engineering has established three awards to honor outstanding alumni.

### Engineering Hall of Fame

Membership for the highest honor that can be bestowed on College of Engineering alumni is reserved for individuals who have made sustained and meritorious engineering and/or managerial contributions during their careers.

### Academy of Distinguished Engineering Alumni

Membership is reserved for individuals whose contributions to Georgia Tech, the engineering profession and field, and/or society have brought distinction to themselves and the Institute.

### Council of Outstanding Young Engineering Alumni

Membership is reserved for alumni under 40 years of age who have demonstrated outstanding professional achievements.

ECE is seeking nominations for these awards. Please send names to:  
Dr. Hans B. Püttgen  
School of ECE  
Georgia Institute of Technology  
Atlanta, GA 30332-0250

# Dan Fielder: A Treasure and an Inspiration

**D**aniel C. Fielder, an energetic and enthusiastic professor emeritus in the School of Electrical and Computer Engineering completed 50 years of teaching at the Institute on September 1, 1998.

The author of over 75 publications, papers, and reports, Dr. Fielder is responsible for the QMCF method for Boolean equation reduction, and he also has nine special purpose integer series which bear his name. Dr. Fielder, who celebrated his eighty-first birthday on October 10, 1998, is held in high esteem by all who have been privileged to know and work with him.

"I first encountered Dan Fielder nearly 40 years ago, when, as a graduate student, I attended some of his lectures. What I remember of that is the excitement and enthusiasm he brought to the task, his literally bouncing up and down, chalk in hand.

Today, he still lectures and still bounces, clearly still in love with his subject and the teaching of it, clearly a man with coincident vocation and avocation, a unique and inspiring individual," said Roger P. Webb, ECE chair.

"From machining replacement parts for a late 1940s Buick to having Socrates, his faithful dog, as his constant companion, Dan has been unique in ECE. Dan has more enthusiasm for teaching and learning than almost anyone else I have known. I'm really grateful that he has remained an important part of our educational program for so long. What a treasure!" added William E. Sayle, ECE professor and associate chair for undergraduate affairs.

"Although a senior faculty member at the time, Dan was one of the first to embrace the use of computers in education and research. He's still at the forefront of technology as exemplified by the recent acquisition of his second digital camera. He's an inspiration for all of us on both a personal and professional level," said Russell Callen, ECE associate professor.

Dr. Fielder's current research interests are in the areas of theoretical circuit theory, automata, discrete mathematics, and combinatorics. Dr. Fielder earned both the BS (EE) and Professional Degree

(EE) from the University of Rhode Island, and he earned the MS (EE) and PhD (EE) degrees from Georgia Institute of Technology. •

## Memories...

*I have known Dan for many years now. I first met him in 1981, when, as a new assistant professor fresh out of graduate school, I was assigned an office on the second floor of the Van Leer Building near Dan's office. When I would pass by Dan's open door, his faithful dog, Socrates, would look up at me through half-closed eyes. I was somewhat intimidated by it all. There always seemed to be a constant stream of students going in and out of Dan's office, and always, lively enthusiastic discussions were heard in his domain.*

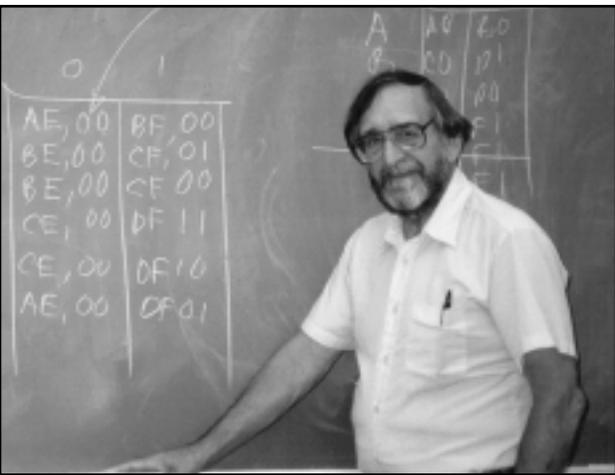
*One day, Dan called me in and showed me some combinatorics. Not being an aficionado of finite mathematics at the time, I could only marvel at the passion by which he seemed to be consumed. He showed me some letters from famous mathematicians discussing some of his work. Although I was impressed, I soon moved into another office, and with that move, my brief initial interactions with Dan also declined.*

*Several years later, one of my PhD students, Baecil Park, was interested in the structure of periodic systems. So, we studied some aspects of realization theory. Soon, it turned out that we needed combinatorial arguments. Who better to turn to than to Dan? He had all the information we needed about partitions. All of a sudden, this whole combinatorics thing became interesting. I discovered the beauty and the passion behind Dan's work and marveled how he had nurtured generations of students through combinatorics and had inspired them with his boundless enthusiasm.*

*Since then, I have discovered that Dan and I have a lot of common points of interest, like Laplace transforms and complex variables, finite mathematics, puzzles, and computer algebra (Here we are complementary since Dan is a Mathematica aficionado, and I am a Maple user.) It is always a joy to chat with Dan, exchange ideas (he has many), and get the right encouragement to "keep up the good work."*

*Two years ago, he attended, with fervor, the Mathematical Association of America (MAA) short course on finite fields and applications. He also gives presentations at various conferences (many in Europe) and keeps a lively correspondence with colleagues in the U.S. and overseas. Recently, with colleague Paul Bruckman, he wrote a monograph on Fibonacci Entry Points, a long-time passion. At 81, Dan still has curiosity and an interest in learning new things, giving distinctive meaning to creating a habit of life-long learning.*

—Erik I. Verriest  
ECE professor



*"He never met a Series he didn't like, nor a Fibonacci number, nor a TRS-80 computer."*

—Cecil Alford  
ECE professor



# Alumni News

**Robert T. Hawk**, BEE '52, retired as a Lieutenant Colonel after 30 years as an electrical engineer in the U.S. Army. He now takes care of a few beehives and owns a 1927 Model T automobile.

**Jerry Sumrell**, BEE '81, MSEE '86, has been named manager of electrical engineering for Lindsay, Pope, Brayfield, & Associates in Lawrenceville, GA. Jerry lives in Atlanta with his wife, Jennifer.

**Rosalind Wright Picard**, BEE '84, is presently an associate professor at the MIT Media Laboratory. She was awarded tenure in July 1998.

**Charles Rugar**, BEE '84, is working as a financial advisor for American Express Financial Advisors in Richmond, VA.

**Mark E. Stallion**, BEE '85, completed his JD law degree after working as an engineering project manager for 12 years. He is currently working as an intellectual property attorney at the firm of Herzog, Crebs & McGhee in St. Louis, MO.

**Steve Zembrzowski**, BEE '87, started Intelligent Technology Systems in 1995. The focus of the company, which has generated over \$10 million in total gross revenue, is selling Sun Microsystems Servers.

**Bruce A. Woodruff**, BEE '88, is a junior at the University of Florida College of Dentistry. He anticipates practicing general dentistry in western North Carolina.

**John David Scott**, MSEE '90, is a sales engineer for Nortel in Atlanta.

**M. Brian Blake**, BEE '94, is pursuing a PhD in Information Technology and Engineering and specializing in Software Engineering at George Mason University. He is also working as a senior computer scientist for Trident Data Systems in the metro area of Washington DC.

**Chris Hovis**, BEE '94, is entering his final year of the MBA program at the Wharton School of Business at the University of Pennsylvania. After graduation in May 1999, Chris hopes to return to the Southeast.

**Colin Wright**, BEE '94, is working in software development for an Atlanta consulting firm, NewEnergy Associates. He just won the Alumni Association's Ramblin' Wreck Volunteer award.

**Susan E. Fletcher**, BCmpE '96, who has been working for Algorithm Inc. and Ration Design Lab, Inc. in Atlanta, is preparing to apply to MBA/JD programs at Stanford, Harvard, and Emory universities.

**Bruce C. Kim**, PhD '96, is an assistant professor with the Department of Electrical and Computer Engineering at Michigan State University. Prior to joining the faculty of MSU, he was an assistant professor at Tufts University. Dr. Kim received the NSF CAREER Award in 1997.

**Mitch Rolnick**, BEE '97, is working in the engineering standards group for AT&T in Atlanta. He specializes in fiber optic transport technologies and is helping to write standardization documents for switching offices around the country.

**Donna Williams**, BEE '98, is working as a marketing sales support engineer for Hewlett Packard in the Electronic Test and Measurement Division in Colorado Springs, CO.

## You're Invited...

### Kent Cullers

Search for Extraterrestrial Intelligence (SETI)  
Thursday, March 11, 1999  
3:00PM-4:00PM, Van Leer Auditorium

Kent Cullers is a SETI pioneer, recently portrayed in the movie "Contact" with Jodie Foster. He was instrumental in the NASA SETI effort, primarily in signal detection algorithms, and currently directs the SETI Institute's targeted search efforts. As the first totally blind physicist in the US, Kent is also active in the San Francisco Lighthouse for the Blind and Visually Impaired.

For more information contact Jackie Nemeth at 404.894.2906 or jnemeth@ece.gatech.edu

**We Want to Know!** Share your news with your ECE classmates and friends. Just complete this form, clip, and mail. Please print legibly or type.

Name \_\_\_\_\_ Degree/Year \_\_\_\_\_

Information for ECE News \_\_\_\_\_

New Address \_\_\_\_\_

Daytime Phone \_\_\_\_\_ Email \_\_\_\_\_

Mail to Suzy King or Harry Vann at the address listed on the back or visit our web page at <http://www.ece.gatech.edu/alumni> and tell us online!

## New Faculty



Vincent J. Mooney, III, Assistant Professor  
BS '91, Yale University  
Certificate of Graduate Study (EE) '92, University  
of Navarra, San Sebastian Spain  
MSEE '94, Stanford University  
MA '97, Stanford University (philosophy)  
PhD '98, Stanford University  
Area: Computer engineering  
Dr. Mooney's research and educational interests  
include system level design, hardware-software  
co-design, synthesis of reconfigurable architectures,  
logic synthesis, and application-specific system  
design.



Chai-Keong (C.-K.) Toh, Assistant Professor  
Diploma (Merit Award) '86, Singapore Polytechnic  
B.Eng. '91, University of Manchester Institute of  
Science and Technology  
D.Phil. '96, University of Cambridge  
Area: Telecommunications  
Dr. Toh came from Hughes Research Laboratories  
in Malibu, CA, where he was a project leader in ad  
hoc wireless networks and in satellite and wireless  
ATM networks. Currently, Dr. Toh leads the Mobile  
Multimedia and High Speed Networking Laboratory  
and is affiliated with the Georgia Tech Wireless  
Institute. He is also a visiting faculty member at the  
National University of Singapore.



Nikil S. Jayant, John Pippin Chair; GRA Eminent  
Scholar; Director, Georgia Tech Wireless Institute  
BS '62, Mysore University, India (Physics/Math)  
BS '65, Indian Institute of Science (Electrical  
Communications)  
PhD '70, Indian Institute of Science, Bangalore,  
India/Stanford University  
Area: Telecommunications  
*Please see related article on page 5.* •

## Faculty/Student News

### FACULTY

**April S. Brown, John B. Peatman, and Gordon L. Stüber** were named as Fellows of the Institute of Electrical and Electronics Engineers (IEEE). Dr. Brown became ECE's first female IEEE Fellow and was honored "...for contributions to the development of lattice-matched and pseudomorphic high electron mobility transistors." Dr. Peatman was named as an IEEE Fellow "...for contributions as an educator in the design of digital systems." Dr. Stüber was named as an IEEE Fellow "...for contributions to mobile radio and spread spectrum communications."

The U.S. semiconductor industry awarded a Focus Center Research Program to the Microelectronics Research Center (MiRC) in the area of improving microchip performance. Georgia Tech will lead a six-university consortium that will receive up to \$19.5 million over the next three years to conduct research leading to radically new architectures for the multilevel wiring networks connecting billions of transistors on future microchips. **James D. Meindl** leads the Focus Center and also serves as MiRC director.

### STUDENTS

**Parag Doshi** was awarded the Sigma Xi Best PhD Thesis Research Award for his dissertation entitled "Fundamental Understanding and Integration of Rapid Thermal Processing (RTP), PECVD, and Screen-printing for Cost-effective, High-efficiency Silicon Photovoltaic Devices." His advisor is **Ajeet Rohatgi**. •