ECE CONNECTION

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

ALUMNI MAGAZINE . FALL 2008

INSIDE THIS ISSUE:

LSU

Department Update

This year has been particularly successful for the Electrical & Computer Engineering Department (ECE), as the Department's ranking in the *U.S. News & World Report* climbs once again to be placed 83rd out of 167 graduate programs evaluated nationwide.

On the teaching front, a particularly exciting development is the recent decision to make senior design projects a required part of the ECE curriculum. Design exercises have long been a staple of engineering higher education, but the flexibility of a culminating major design project makes it a much more attractive vehicle for employers wishing to evaluate the potential contributions of students in their companies. Support from local (and not-so-local) industry will be crucial in making this new program a success.

The Department's vital "FOREVER LSU" Campaign continues to gain momentum under the expert leadership of alumnus **Les Broussard**. The Department would particularly like to thank Les, **Burt McNeil**, **Jerry Rispone**, and **Carolyn and Mark Guidry** for their most generous recent philanthropic donations, helping to establish new endowed professorships

ECE Names Interim Chair

The College of Engineering has announced the appointment of **Dr. Jorge L. Aravena**, Oskar R. Menton Professor, as interim chairman of the Electrical and Computer Engineering Department. With over 28 years of service to LSU, including a stint as ECE graduate studies advisor, Aravena is poised to lead the Department during this period of transition.

A native of Santiago, Chile, Aravena received an electrical engineering degree from the University of Chile at Santiago, and a Ph.D. in computer, information and control engineering from the University of Michigan, Ann Arbor. He has served on the faculty at the University of Chile at Santiago, the University of Santiago, and was head of the Process Control Group at the University of Concepcion, Chile.

Aravena's research interests include system theory, computer-based control systems, and signal processing, especially application of artificial intelligence tools. Recently, he completed a five-year research project on aircraft safety and is now contributing to a research project in passive location of radio sources; e.g., distressed cell phone user and projects in data compression and intelligent autonomous asset protection.

While he is proud of his research experiences, his greatest joy comes from interacting with students. In 2005, LSU students were asked to identify faculty and members of the campus community who had significantly influenced their undergraduate careers. Professor Aravena was one of six individuals identified and featured through "LSU Highlights" for the impact he has had on undergraduate students. He has also served as the faculty advisor to the IEEE student chapter for many years.

When not tackling current projects or mentoring students, Aravena enjoys the art of photography. "I love to tweak pictures with image editors, do slide shows, albums for my daughters. I am trying to learn video editing and work on the movies that Joyce takes. My dream job is to be a nature photographer for National Geographic," said Aravena. He and wife, Joyce, celebrated their 40th anniversary this year with their two daughters.

and laboratories. In recognition of these exciting developments, **Tammy V. Abshire** has been recently appointed to work full-time on ECE alumni relations, development, and the Department's newsletter. As the first newsletter under Tammy's direction, the Department seeks your input and feedback on the redesigned format. It is hoped that you appreciate being kept in touch with the latest ECE news. For all these matters, please e-mail her at **tvabshire@lsu.edu**, telephone 225-578-5478, or write to her at the ECE Department. The Department also thanks **Don Eisenberg** who is now able to concentrate on development work for two, rather than three, LSU departments, and to **Ralph Kinney** who has now retired for the second time after completing his alumni relations work.

The Department continues to recruit the very best young faculty. Earlier this year, **Dr. Georgios Veronis** joined the ECE faculty from Stanford University. He is currently setting up a program in microphotonics with collaborations in the Center for Computation & Technology and also in the Hearne Institute for Theoretical Physics, both at LSU.

Additionally, several Multidisciplinary Hiring Initiatives in Computational Sciences, Materials Science and in Digital Media have received strong support within the University. The Department expects these to impact teaching and research most significantly in the coming years. Digital Media, in particular, is one component of a state-wide effort to grow the digital technology industry in and around Baton Rouge, with solid backing from the State legislature.

Finally, ECE students continue to be in high demand by such well-known companies as Fluor, ExxonMobil, CenterPoint Energy, and many others. In recognition of the Department's rapidly increasing prominence, the ECE Advisory Board was recently expanded by three new members, and the Board is now well-positioned to provide counsel regarding the ECE academic programs and to give direct feedback from the industry.

R. Clive Woods

***Effective June 10th, 2008, Dr. R. Clive Woods no longer holds the title of Department Chairman though remains a full professor in ECE. The Department would like to thank Dr. Woods for his two years of service as Chairman.**

ECE Rises in Recent *U.S. News & World Report* Rankings; LSU Moves into Top Tier

A strong focus of LSU's Flagship Agenda is to raise the rank and profile of LSU among peer universities nationwide and the Department of Electrical & Computer Engineering (ECE) exemplifies that by improving its position in the *2009 U.S. News & World Report: "America's Best Graduate Schools."* Also this year, the University moved into the first tier of the magazine's 2009 edition of America's Best Colleges. *U.S. News & World Report* assesses more than 1,200 private and public college programs nationwide and factors these comparisons based on aspects such as peer school assessment, acceptance rigor, job placement, and assessment of the quality of faculty, research and students.

Electrical & Computer Engineering saw a 13-point increase in ranking this year, receiving a rank of 83rd and moving up from its previous ranking of 96 from 167 schools. The rising rank will help attract more talented students, and greater support for ECE's faculty and students, while also helping to attain the high standards of LSU's Flagship Agenda.

Overall, the College of Engineering is ranked 87th out of 198 doctoral programs, moving up from its previous ranking of 89. For more ranking information, visit **www.usnews.com/grad**.

ECE: By the Numbers . . . 2007-2008 Stats

ECE Enrollment (Fall 2007)

Undergraduate:	308	Female	27	Minority *	60
Graduate:	106	Female	35	Minority *	6
Total:	414	Female	62	Minority *	66

** Minority refers to African, Hispanic and Native Americans*

ECE Degrees Awarded (Summer 2007, Fall 2007, Spring 2008)

B.S.	12	28	41	Total:	81
M.S.	9	20	11	Total:	40
Ph.D.	1	1	1	Total:	3

The 787 Dreamliner:

"I'm using my electrical engineering degree in the areas of digital electronic design, semiconductors and computer engineering."

If you have the opportunity to fly in one of Boeing's brand-new $200 million 787 Dreamliners, you can thank LSU graduate **Karen Brack** (1984, B.S., EE) for making it a safer and more enjoyable flight.

Brack works for Honeywell, a Fortune 500 company with a workforce of more than 100,000. Honeywell was selected to provide the Flight Control Electronics package including autopilot for the Boeing 787 Dreamliner. She began working for Honeywell in 1997. Her current title is ASIC Technical Manager (ASIC means Application-Specific Integrated Circuit).

Karen Brack's Dream Job

"My role has been the project leader of a ten-member team for the development of the programmable, electronic hardware components for the Flight Controls Electronics on the aircraft. I'm using my electrical engineering degree in the areas of digital electronic design, semiconductors and computer engineering," Brack said.

Speaking of her latest project, the 787, Brack cited, "The 787-8 Dreamliner will carry 210-250 passengers on routes of 7,650 to 8,200 nautical miles while the 787-3 will accommodate 290-330 passengers and be optimized for routes of 2,500 to 3,050 nautical miles."

She pointed out, "The 787 will provide airlines with unmatched fuel efficiency, using 20 percent less fuel than any other airplane of its size. It will fly at speeds up to Mach .85 (560 miles per hour)."

Brack is a member of the Advisory Board for the Electrical & Computer Engineering Department at LSU and is president of the San Diego LSU Alumni Association Chapter.

When asked what interested her to pursue this field, she replied, "I had a very strong math and science background before I got to college. My Junior Division counselor suggested three ways I should consider going: Computer Science, Quantitative Business Analysis or Electrical Engineering. I chose EE. My primary mentor at LSU was **Dr. Ralph Kinney**, now retired."

Excerpt taken from Fall 2007 *LSU Alumni Magazine* by Ray Dry. For the complete story, visit **http://www.lsualumni.org/stuff/mag_fall2007.pdf**

ECE Advisory Board Increases by Three

The LSU Electrical & Computer Engineering Department Advisory Board has increased its membership by adding three new members: **Frederick "Rick" M. Brooks**, **Gregory J. Clement** and **Michael T. Miesch**.

Frederick "Rick" M. Brooks, P.E. is president of Brooks & Jackson, Inc., with offices in Baton Rouge and Jacksonville, Florida, and is a 1967 EE graduate. He has over 40 years of experience in design and forensic engineering. His predominant design experience is in electric utility facilities including electric transmission and distribution lines, substations and system protection schemes. Brooks is the former chief operating officer for an *Engineering News Record* Top 500 engineering/architectural consulting firm and is a registered professional engineer in Louisiana.

Gregory J. Clement, P.E. is presently an electrical design engineer at Fluor Corporation, one of the world's leading engineering, procurement, construction and maintenance services companies. In his current role, he serves as a lead electrical engineer on Marathon Petroleum Company's $3.2 billion Garyville Major Expansion Project.

Clement has over 10 years of experience in the energy and chemical sectors, both domestic and international, and is a registered professional engineer in multiple states. He currently serves on a National Electric Code Advisory Board relating to medium voltage applications and holds active memberships in IEEE and LSU's Tiger Athletic Foundation. A proud LSU graduate and native of Louisiana, Greg currently lives in Pearland, Texas, with his wife Dena and their two children, Jack and Annie.

Michael T. Miesch is owner of M&L Consulting, LLC in Baton Rouge. He graduated from LSU with his bachelor's and master's degrees in electrical engineering and spent three years in the Army at the Army Missile Command. Following a short stint in the aerospace industry providing support to NASA, Miesch continued his career in engineering, engineering management and operations, and maintenance management locally with ExxonMobil Chemical. Since retirement, he has spent the last seven years as an independent consultant.

2008 Electrical & Computer Engineering Advisory Board

The ECE Advisory Board provides advice and counsel regarding the Department's academic programs, facilities, research, areas of emerging technology and other such matters for consideration in order to enhance the Department's educational goals. Meeting twice per year, board members consist of alumni and industry representatives, including:

William L. "Bill" Higgins, EE, '65
(ECE Advisory Board Chair)
Vice President
Jacobs Engineering
Houston, Texas

Ravi K. Arimilli, EE, '84
IBM Fellow
IBM Server Group
Austin, Texas

Karen G. Brack, EE, '84
Staff Engineer - ASIC and FPGA Design
Honeywell Aerospace Electronic Systems
La Jolla, California

F. M. "Rick" Brooks, EE, '67
President
Brooks & Jackson, Inc.
Baton Rouge, Louisiana

Gregory J. Clement, EE, '98
Electrical Design Engineer
Fluor Corporation
Pearland, Texas

Joseph "Joe" F. Domino, EE, '70
President/Chief Executive Officer
Entergy Texas, Inc.
Beaumont, Texas

J. Keith Hollier, EE, '79
Control Systems Section Supervisor
ExxonMobil
Baton Rouge, Louisiana

Edwin "Burt" McNeil, EE, '46
Retired, ExxonMobil
Baton Rouge, Louisiana

Michael T. Miesch, EE, '69; M.S.EE, '71
Retired, ExxonMobil
Jackson, Louisiana

Jerry L. Rispone, EE, '85
President/Chief Operations Manager
Industrial Specialty Contractors, L.L.C.
Baton Rouge, Louisiana

Anita L. Schreiber, EE, '85
Senior Staff IP Design Engineer
Xilinx
Albuquerque, New Mexico

Newton B. Thomas, EE, '67
President and Chairman
Newtron Group, Inc.
Baton Rouge, Louisiana

Eugene "Gene" Tims, EE, '43
Professor Emeritus
LSU, Electrical & Computer Engineering
Baton Rouge, Louisiana

Charles H. Voss Jr., EE, '49
Professor Emeritus
LSU, Electrical & Computer Engineering
Baton Rouge, Louisiana

The Department welcomes these three engineers who will bring a wealth of knowledge and new perspective to the ECE Advisory Board.


Gregory J. Clement


Frederick "Rick" M. Brooks


Michael T. Miesch

ECE Incorporates Capstone Design into Curriculum

The IGVC team: (pictured left to right) Geoff Donaldson, Alex Ray, William Burke, David Mustain and Diego González

Capstone Design, a course series offered the past three years to ECE students as a senior elective, will become part of the Department's required curriculum for freshman entering fall 2009. This two-semester–long course brings senior students and faculty together to work on actual design projects, challenging students to use all the knowledge and skill they have acquired in undergraduate study in a real-world application. Under the guidance of an ECE faculty advisor, the first semester work focuses on completion of the design phase. During the second semester, the design team realizes a functioning prototype. Student teams are also responsible for procurement, management, accountability and presentation of their Capstone projects, as they would be in real-world settings. "The teams do as much of the actual work as possible themselves, including sourcing and testing their own materials, and designing and machining their own components," says Capstone Design Instructor **Bryan Audiffred**.

This academic year, ECE students **Alex Ray**, **Geoff Donaldson** and **William Burke** joined forces with mechanical engineering (ME) students **David Mustain** and **Diego González** and faculty advisors **Bryan Audiffred** (ECE) and **Dr. Marcio de Queiroz** (ME) to bring to life "MikeRobot", an intelligent robot that represented LSU for the first time at the Intelligent Ground Vehicle Competition (IGVC) in Rochester, Michigan on May 30. While the LSU team did not take top honors, "MikeRobot" represented LSU in its debut run for the IGVC grand prize. The IGVC requires autonomous robots to successfully complete an obstacle course, with points awarded for staying in the prescribed lane and avoiding obstacles, as well as a subsequent GPS waypoint navigation challenge. Teams are also judged on written design reports and oral presentations.

Next year's Capstone teams can select one among a variety of design options, including but not limited to the IGVC, the Shell® Eco-Challenge Racer Competition and the Formula SAE race car challenge. Other project possibilities for achievement and innovation in Capstone Design involve indoor sensor positioning networks and dynamic media display systems. Opportunities for Capstone Design application will grow as the new ECE requirement continues to gain momentum and interconnect with other College of Engineering (CoE) Capstone programs.

> *"The teams do as much of the actual work as possible themselves, including sourcing and testing their own materials, and designing and machining their own components,"*
>
> **says Capstone Design Instructor Bryan Audiffred.**

Many other CoE degree programs feature a Capstone Design requirement. The promotion of this addition to curriculum status puts ECE on a curricular par with the other CoE departments. Additionally, Capstone Design is CxC-certified, a Communication Across the Curriculum (CxC) designation for communications-intensive courses that count towards the students' "High-Level Communicator" transcript distinction. Moreover, the Capstone Design series attracts guest lecturers on design-focused topics as well as sponsorship and support from industry partners, and builds connections with other interest groups and institutions outside LSU. In order to demonstrate their support, the Department gives Capstone students 24-hour access to dedicated lab resources.

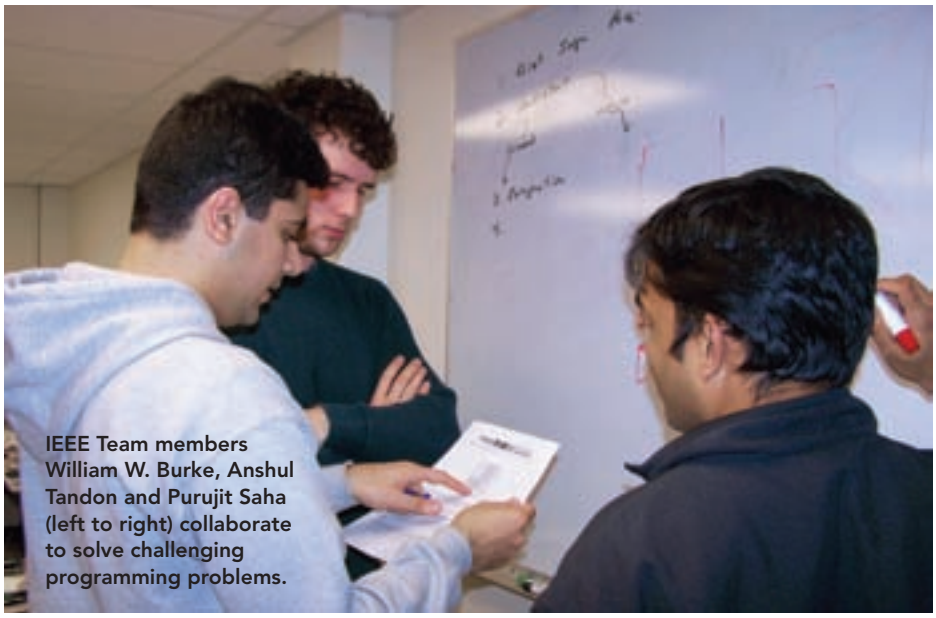
The course change enhances the interdisciplinary aspects of the Capstone Design program and gives students valuable teamwork experience, as ECE students are able to team with their colleagues in related disciplines to project, and then execute, these original designs.

LSU Engineering Students Take Programming to the Extreme

IEEE student group competes in worldwide virtual programming contest

LSU placed 28th among 130 teams from 31 countries in this year's IEEExtreme Programming Contest, a 24-hour programming competition which challenges teams of undergraduate and graduate minds around the world against each other and the clock to solve a host of programming conundrums. Even more impressive is the fact that this was LSU's first time participating in such an event. "The IEEE team's excellent showing amid such formidable international competition reflects very positively on the ECE Department," said Dr. Jorge Aravena, IEEE Student Chapter Advisor. LSU's three 2008 IEEE team members, all ECE graduating seniors, were: **Anshul Tandon**; **William W. Burke**, a summa cum laude graduate; and **Purujit Saha**, who is also a 2008 Edward McLaughlin Dean's Medal for Excellence recipient.

"Contests are a great way to get students involved in organizations," said team member Purujit Saha. These types of activities help the IEEE achieve its ultimate goal of increasing the organization's activities, awareness and membership.



IEEE Team members William W. Burke, Anshul Tandon and Purujit Saha (left to right) collaborate to solve challenging programming problems.

TRIVIA CORNER:

Actual question and student answer from **Dr. Leszek Czarnecki's** recent test:

Question: How did Maxwell contribute to electrical engineering?

Answer: Maxwell made coffee so all of the other EE students could stay up all night and remember conversion factors of [kcal] to [kwh].

Computer Engineering Graduate Honored as Edward McLaughlin Dean's Medal for Excellence Recipient

Computer engineering graduate **Purujit Saha** has been named a spring 2008 Edward McLaughlin Dean's Medal for Excellence recipient for his academic achievement at LSU. Each semester, the McLaughlin Medal is awarded to College of Engineering students who graduate with the highest grade point average. Saha, graduated in May with a perfect 4.0 GPA and has also received the College of Engineering Alumni Scholarship. He has been on the Chancellor's Honor Roll and is involved in IEEE.

Saha, native of Dhaka, Bangladesh, is joining Microsoft as a software development engineer and plans to one day earn his Ph.D. He then intends to join one of the national supercomputing facilities.

Saha says the most interesting thing he has done while here at LSU was compete in the IEEExtreme Programming Competition in 2008. Although he graduated at the top of his class, Saha said he could not have done it without the help of many professors.

Edward McLaughlin Dean's Medal for Excellence recipient Purujit Saha

"**Dr. Jorge Aravena**, my student job supervisor, was extremely helpful when I applied to graduate schools. Also, **Mr. John Scalzo**, my ECE undergraduate advisor, helped me a lot with my transfer credits," said Saha. His favorite professors, while here at LSU, include **Dr. David Koppelman**, **Dr. Jorge Aravena**, **Dr. Paul Paskoff** and **Dr. Benjamin Price**.

The Edward McLaughlin Dean's Medal for Excellence was created in 1997 by the Dean's Advisory Council of the College of Engineering, led by **Newton B. Thomas**, to recognize the outstanding contributions of Dean **Edward McLaughlin** during his 28 years of service to the University as a professor, researcher, Chemical Engineering Department chairman, and dean.

Electrical & Computer Engineering Graduates

Congratulations graduates!

ECE fall class of 2007

Fall 2007

Bachelor of Science:

Olufemi Awarun**
Kenneth Beler II
Jason Bourque
Nicholas Colomb
Aimee Duke
Christopher Durrett
Michael Falcon
Randall Fannin
Michael Fazely
Jeffrey Frantz
Allen Garland
Joshua Green*
Benjamin Kasten
Adam Kennedy
Michael Lopez
Mariel Losso
Thomas Lukowski
Megan Major
Asanka Mananayaka
Delaney Mitchell*
Adewemimo Oyekenu
Ryan Reeves
Matthew Romano
Savio Silva
Brian Taylor
Britney Theriot
Sital Tiwari
Tracy Toups

Masters of Science:

Adeyabeba Abera
Charisma Dionne Edwards
Mostafa Kadry Elbidweihy
Archana Geggalapally
Lutfi Murat Gevrekci
Sundeep Kumar Gopal
Krishna Kishore Gunturu
Jui-Ching Hsu
Yunmi Jeon
Varun Kamalakaran
Kyung-Nam Kang
Jinhui Liu
Cheng Luo
Laurentiu Dan Marinovici
Pooja Mathur
Abhishek Parakh
Seung Hoon Park
Maruti Venkat Kartik Satti
Prathyusha Akunuri Venkata
Shaohua Wang

Doctor of Philosophy:

Veronica Bohorquez

Veronica Bohorquez, fall 2007 Ph.D. graduate with her major professor, Leszek Czarnecki, and her daughters

ECE spring class of 2008

Spring 2008

Bachelor of Science:

Adetoyebi Adedipe
Riley Andrews***
Jason Authement
Dominic Babineaux
Daniel Brignac*
William Burke***
Michael Carroll
Jacob Champagne**
Jed Clapp
Marshall Dantin
Andrew Davidson
Christopher Duensing
Gregory Forest
Andrew Gautreaux
Jonathan Gonzales
Matthew Hebert***
Christopher Higgins
Johnathan Hills
Gregory Hopkins
Jared Jones
Paxton Kennedy***
Drew Lewis
Matthew Mapes
Joshua Mayer
Jacob Miller
Michael Minvielle
Peter Mistretta
Benjamin Nichols*
Daniel Nixdorff*
Karthik Omanakuttan***
Scott Padgett
Kathryn Roussel***
Purujit Saha*** °
Garrett Schram
Nathaniel Severin
Mansi Sheth**
Matthew Sibley
Brandon Suarez
David Tran
Joseph Veron
Charles Wright Jr.

Master of Science:

Luis Donaldo Alvergue
Partha Basuchowdhuri
Youngjeon Cho
Xiaobo Li
Chaoxuan Liu
Hua Shao
Alexandre S. Tabbal
Maoyuan Xie
Yao Xu
Qiang Yu
Zhifeng Yun

Doctor of Philosophy:

Nike Liu

*** Summa cum Laude (3.9-4.0 GPA)
** Magna cum Laude (3.8-3.9 GPA)
* cum Laude (3.7-3.8 GPA)
° McLaughlin medalist (Highest GPA per semester)

Pictured here: Faculty Advisor Dr. Hsiao-Chun Wu, CoE Alumnus Donald Clayton and Clayton Award Recipient Charisma D. Edwards.

Edwards Wins Clayton Engineering Excellence Award

ECE proudly celebrates **Charisma D. Edwards**, who represents ECE among this year's recipients of the prestigious Clayton Engineering Excellence Awards. A cum laude graduate of Clark Atlanta University, where she was a fellow of the Georgia LSAMP Program for Research Integration in the Science for Matriculation to the Doctorate (PRISM-D), Charisma has conducted research at the University of Pennsylvania, Emory University, MIT Lincoln Laboratory and the Naval Research Laboratory. At Emory, Charisma studied magnetic therapy for stroke patients. While at LSU, she tutored for the Recruitment into Engineering of High Ability Minority Students (REHAMS) program in 2006 and taught in the East Baton Rouge school system. She is currently the LSU Fellow of both the NSF Alliances for Graduate Education and the Professorate (AGEP), and the Louisiana Louis Stokes Alliance for Minority Participation (LA-LSAMP) Bridge to the Doctorate Program (BDP). Her research seeks to advance the field of biomedical imaging and instrumentation in electrical engineering.

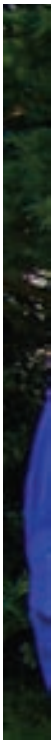
The Clayton Awards are awarded annually to selected outstanding undergraduate and graduate students in the College of Engineering in recognition of the recipient's exemplary character, scholastic achievement and active leadership. Graduate scholars are awarded a $10,000 stipend, and the graduate student's principal adviser receives a $2,000 stipend. The Clayton Awards bear the name of their founding benefactor, **Donald W. Clayton** (B.S. PETE, 1959), who also established an Engineering Ph.D. graduate assistantship supplement. In 1993, Mr. Clayton was inducted into the College of Engineering Hall of Distinction.

ECE Salutes our Recruits

The ECE Department wishes to express our appreciation to the following companies for their presence on campus and recruiting our undergraduate and graduate electrical and computer engineering students.

2007-08 Corporate Recruiters

Abercrombie and Fitch
Accenture
Aerotek
Agricultural Research Services, USDA
Air Liquide America
Albemarle Corporation
ALSTOM Power, Inc.
ALTEC Industries, Inc.
American Airlines
American Solutions, Inc.
ANH Refractories Company
Antares Technology Solutions
Arcmail Technology
ARGO
AT&T
Audubon Engineering
Baker Hughes
Bambeck Systems Inc.
Baton Rouge Transition to Teachinga
Battelle
Bearingpoint
Beta Engineering/DIS-TRAN
BJ Services
Black & Decker
Blue Cross and Blue Shield of Louisiana
Bollinger Shipyards, Inc.
BP America
Brink's, Inc.
Burk-Kleinpeter, Inc.
C & C Technologies
Capital One, N.A.
Cargill
Carrier Corporation
Carter & Burgess
CDI Engineering Solutions
CDM
CenterPoint Energy
CenturyTel
Champion Technologies
Chevron
Chevron Information Technology Co.
Chicago Bridge & Iron
Cleco Corporation
Colonial Insurance
Colonial Pipeline
ConocoPhillips
Constructors & Associates
Convergys
Cooper Industries
CRA Engineering Group, Inc.
Cypress Semiconductor
Dashiell
Diamond Data Systems
Dillard's Information Systems
Dow Chemical Company
Drug Enforcement Administration
DuPont
Eaton Corporation
EDG, Inc.
El Paso Corporation
Emerson Process Management
Emerson Process Management - Refining and Chemicals
ENERCON Services, Inc.
Engineering & Inspection Services, LLC
ENSCO Inc.
Entergy Services, Inc.
Enterprise Products Partners
Enterprise Rent-a-Car
Equifax
ES&H, Inc.
Expro Americas
ExxonMobil
Federal Bureau of Investigation (FBI)
Federal Communications Commission
First Investors Corporation
Florida Crystals
Fluor
FM Global
FM Global - Field Engineering
FMC Technologies Incorporated - Energy Systems-Subsea
Foster Wheeler USA Corporation
Future Pipe Industries
G.E.C., Inc.
General Electric Energy Services
Georgia-Pacific LLC
Gramercy Alumina, LLC
Guaranty Broadcasting Company
Gyrodata, Incorporated
Halliburton
Halliburton - Energy Services Group
Hancock Bank
Hanover
Helmerich & Payne, Inc.
Honeywell
Hydril LLC
IEM, Inc.
INROADS
Insight Global
Intellex Corporation
Intergraph Corporation
International Paper
International Student Volunteers
Invensys Process Systems
ISN
J. Ray McDermott, Inc.
Jacobs Engineering Group
JCPenney
JDSU - Telecommunications
JobsInLouisiana.com
Johnson Controls, Inc.
JP Morgan Chase
Kalmans Marshall Engineering, Inc.
Kay Jewelers - A Division of Sterling Jewelers
KBR
Kiewit Corporation
Kohl's Department Stores
KPMG LLP
LAPTEC
Liberty Mutual
Los Angeles County Department of Public Works
Louisiana Air National Guard
Louisiana Department of Environmental Quality
Louisiana Department of Public Safety
Louisiana Department of State Civil Service
Louisiana Generating
Louisiana Machinery
Louisiana State Police
Louisiana Steam Equipment
LSU Information Technology Services
Lyondell Chemical Company
Marathon Oil Company



Maverick Technologies
Maxim Integrated Products
Microsoft
Monsanto Company
Mosaic - Louisiana Operations
MRE Consulting, Ltd.
Mustang Engineering
National Security Agency
Naval Surface Warfare Center-Panama City
Nissan North America
Norfolk Naval Shipyard - Engineering Departments
Northrop Grumman
Odebrecht Construction, Inc.
Oldcastle
Oncor
Oxy Chem - Manufacturing
Parkway Properties
Pathfinder Energy Services
Peace Corps
Pegasus International
Peri Software Solutions
Petrotech, Inc.
Plymouth Tube Company
PPG Industries, Inc.
Prime Source Building Products
Procter & Gamble
Progressive Insurance
Providence Engineering & Environmental Group LLC
PSL North America LLC
Quorum Business Solutions - TDCC
Raytheon Company
Redmane Technology LLC
Regions Financial Corporation - Management Associate Program
Republic National Distributing Company, LLC
Reynolds and Reynolds
SAIC
Sanderson Farms, Inc.
Schlumberger Technology Corporation
Shell Oil Company
Siemens Building Technologies, Inc.
Sky Ranch Christian Summer Camp
SOGETI USA LLC - Houston Office
Southern Company
St. Jude Children's Research Hospital
Stanley Consultants, Inc.
Stone Energy
Superior Well Services, Inc.
Target Stores
TCB-AECOM - Turner, Collie & Braden
Teach For America
Techgene Solutions LLC
Temple-Inland
The Automation Group
The City of Baton Rouge
The CNA Corporation
The Princeton Review
The Shaw Group, Inc.
Triad Electric & Controls, Inc. - a subsidiary of The Newton Group
Trinity Consultants
TTS Solutions Inc.
Turner Construction Company
U.S. Air Force
U.S. Border Patrol
U.S. Department of Energy
U.S. Department of State
U.S. Department of the Navy - The Office of Civilian Human Resources
U.S. Navy
U.S. Peace Corps - Southwest Recruitment Office
United Space Alliance
University Directories
URS Corporation
USG Corporation
USG Corporation - USG Interiors, Inc.
Valero Energy Corporation
Vedicsoft Solutions Inc.
Waldemar S. Nelson and Company, Inc.
Walgreens
Warner Robins Air Logistics
Weatherford International - EDI
Wells Fargo Financial
W-H Energy Services
Wink Companies, LLC
Wolseley's North American Division
Your Other Warehouse/ Home Depot Direct
Zachry Construction

2007-08 IEEE Student Chapter Officers

Austin Moreau
Treasurer
Hometown:
Baton Rouge

Geoff Donaldson
Vice Chair
Hometown:
Baton Rouge

Alex Ray
Chair
Hometown:
Jennings

Franklin Sands
Secretary
Hometown:
Denham Springs

John Harvey
Marketing Director
Hometown:
St. Francisville

Dr. Michel B. Voorhies (Before restoration)
To view the restored photo, see article on Michel Voorhies (page 13) in this issue of ECE Connection.

Kinney Takes a Second Shot at Retirement

Dr. Ralph Kinney is doing it again—or at least we think so

In 1998, **Dr. Ralph Kinney** thought he would retire from LSU, but the University asked him to return. A professor emeritus of electrical engineering who also helped build ECE's website and strengthen ties with alumni, Kinney maps his life story around a series of fortuitous happenstances that led to smart decisions and focused application, as well as a two-term ECE career, an LSU legacy spanning over 35 years, and nearly a half-century of married union. Now, Kinney is moving into new life endeavors after taking a second retirement from electrical engineering in 2007.

Kinney was born in 1930 to hardworking parents in Frostproof, Florida. However, he hails Lake Placid, Florida, as his real hometown. Living through the Great Depression, his mother, a schoolteacher, and his father, a mechanic, struggled while rearing a bright, young boy. Kinney demonstrated early the ability to excel academically, graduating in 1948 as salutatorian (in a class of 13), and earning a B.S. in physical education with a mathematics minor four years later, at the University of Florida at Gainesville.

While an undergraduate, Kinney enrolled in Reserve Officers Training Corps (ROTC). Upon graduation he was called to active duty as a 2nd Lieutenant in the Army Reserves (Artillery). The duty of target location for artillery involved the use of electronic gear, where he developed an interest in electronics.

After his discharge, Kinney returned to the University of Florida. Initially, he took Introduction to EE and a physics course to test the interest developed in the service. EE was "interesting—I was already familiar with about half the math in the introductory course;" stated Kinney who added that physics also struck a chord, "and I stuck with it." He worked for two years at Northrop Corporation in California after completing a master's degree and received his Ph.D. in EE.

Kinney first met his future wife Gail in 1959, in the coffee room at University of Florida's College of Engineering. She was usually about 150 miles away at Florida State University (FSU), but as a summer student worker at the UF College of Engineering Publications Department, she also brewed the daily coffee. "I figure I saw her first, and homed in as soon as possible. That was truly an outstanding time for me," Ralph says fondly of meeting Gail, and of his years in Gainsville. Ralph and Gail married immediately after her graduation from FSU. Their union produced three children: daughter Alison, born in California in 1961, followed by son Scott in 1963 and daughter Robin in 1965, both in Florida.

In 1967, Ralph moved to Baton Rouge to assume his first

post as associate professor at LSU, rising to full professor in 1975. He served as interim department chair from 1976-77, and remained a full-time faculty member for 31 years until 1998. Kinney experienced another set of firsts at LSU, notably his first crawfish boil, dark roast coffee and his first teaching assignments. He remembers very clearly calling roll during his first semester and learning to pronounce "Hebert" among other locally-common French names. "Those students had a lot of fun with me," he laughs, "so I quit calling roll." While at LSU, Kinney also welcomed his first grandson: a boy, Connor, born to daughter Alison in 2000. He has since welcomed his first granddaughter, Mila Vie, born in November, 2007 to son Scott.

His first retirement in 1998, as professor of electrical engineering, was a brief one; he was re-recruited as part-time faculty in 2004, and retired a second time last year. During his second stint in ECE, Ralph helped renew ECE's connection to its graduates by creating and maintaining the Department's alumni web page, as well as managing the ECE alumni database. He also served as co-editor of the Departmental newsletter formerly named *Tiger Bytes*, and encouraged fellow faculty to write articles for web publication. Now settling into re-retirement from ECE, Ralph still enjoys visiting the Department frequently, as well as giving "non-expert support" to his wife's musical endeavors on piano and flute at the Baton Rouge Music Club and St. John's Methodist Church, as well as in other venues. "She's really the talented one," he points out. Ralph and Gail will celebrate 48 years of marriage this year; after nearly a half-century together, he says, "I'm finally starting to get the hang of it."

Ralph's newest hobby is restoring old family photos using Adobe Photoshop digital retouching and refinishing technology, and building a digital library of those restored images (see restoration sample pictured here). He has completed eight of the 30 trays of old slides and several hundred images from negatives and prints he has selected to restore and archive. "I've learned a lot [doing the restorations]—I've really enjoyed it." Ralph can still find time for LSU while enjoying his newfound freedom. Perhaps, he will return for a third LSU career, this time to teach digital photo restoration.

Pictured here: Sample of restoration Subject: Vivian Blanche Pourciau (Photo Courtesy of Angela Fleming, her granddaughter and former ECE employee)

Pictured here:
Michel B. Voorhies
(Restoration courtesy
of Dr. Ralph Kinney)

Through His Daughter's Eyes:

A Memory of Professor Michel B. Voorhies

Many people live lives that become part of history while other people's lives make history itself. As a constant presence over nearly a half-century of flux and transformation, Professor **Michel B. Voorhies** was an active force in shaping and shepherding the College of Engineering (CoE) and countless numbers of its graduates. He served LSU for 47 years, from his 1915 graduation from the CoE until his retirement in 1962. He was head of the Electrical Engineering Department for 30 years, and acting dean of the College for four years. We recently sat down with Professor Voorhies' daughter, Mrs. **Millie Menton**, who shared her perspective on the life and work of the man she called "Daddie" and on his relationship of nurturing and parenting that he extended to many of his engineering students and the LSU community.

Michel B. Voorhies was born in St. Martinville, Louisiana and graduated from the State High School in 1909. He entered LSU as an undergraduate in 1912. Three years later, he graduated with a B.S. in electrical engineering, then continued as an instructor. In 1917, he volunteered in the U.S. Army and served in France during WWI as a 1st lieutenant, where he was honorably discharged with the rank of captain. For more than 10 years, he served on the faculty as an assistant professor, associate professor and professor before being named chairman of the Electrical Engineering Department in 1931.

Voorhies received a master's degree in electrical engineering from LSU in 1925 and another master's degree from the University of Michigan in 1931. In November 1941, while Dean Leo LaSalle left to serve a brief tour as head ordinance engineer at the Frankfort Arsenal, Voorhies began serving as acting dean of the College of Engineering. Upon LaSalle's return, Voorhies remained as assistant to the dean, then reassumed the chair of the Electrical Engineering Department which he held until his retirement in 1962. He often served as consultant to municipalities and industry during and after his LSU career. A member of Phi Kappa Phi, Omicron Delta Kappa, Tau Beta Pi and Theta Xi, Voorhies was also active in AIEE affairs.

Mrs. Menton says that it was during his years as an active instructor that her father made his most lasting mark at LSU—on the minds and hearts of his many students. Among the most vivid recollections that Professor Voorhies' students share was his infamous pocket watch, which he traditionally placed on the table before him at the beginning of his classes. While lecturing, he would circle the chain of the pocket watch on the table around its perimeter with his finger. Somehow in this way "he knew exactly when to let those kids go," she recounts. Like many of his students, she also remembers her father's signature seersucker suits—and his color blindness.

In addition to the many school sto-

ries, Millie also fondly recalls aspects of her father's personal life, such as his love for horses, which stemmed from a teenage job where he worked on horseback. Although she was an only child, she felt that her father's LSU students were also just as important to him. He made a habit of speaking to each of his students personally, so he knew their strengths and capabilities. He treated his students as colleagues, rather than as subordinates. "He loved to teach—and didn't enjoy administration," she remembers. The students, for their part, responded very well to Voorhies' genuine respect and concern. Their level of ease and comfort with Voorhies was such that they often visited him at home. "He enjoyed the young people, and I know that they enjoyed him," she says, offering as evidence a spate of children named Michael after a parent's favorite professor at LSU. He also assisted in career placement for many of his graduates, as he was often solicited by industry for referrals of his graduates, whose professional progress he followed with fatherly pride.

Michel was not the only Voorhies to devote himself to the pursuit of knowledge at LSU. His first cousin Alex had been head of chemicals at Esso Corporation, which evolved into today's ExxonMobil. After retiring, Alex also taught chemical engineering at LSU and was named professor emeritus. Thus, the Voorhies tradition at the College was born.

Upon his retirement, the president of LSU and the Board of Supervisors gave tribute to his long-term contributions to the University and the community. His greatest tribute, however, comes from many of his students who became electrical engineers and remember him like John "Skip" Ritter did, as "the most loved professor I ever had," or his daughter Millie does, as a nurturing father figure with a gold pocket watch.

"I enjoyed every minute of Professor Voorhies' classes. He was a delightful man. If I amounted to anything, it's because of him."

Ben Daniels, B.S.EE 1944, Baton Rouge

"I give Voorhies credit for my electrical power education allowing me to be able to complete my 30th year as an engineer in private practice in the electric utility power and communications field and 50 years in the engineering profession."

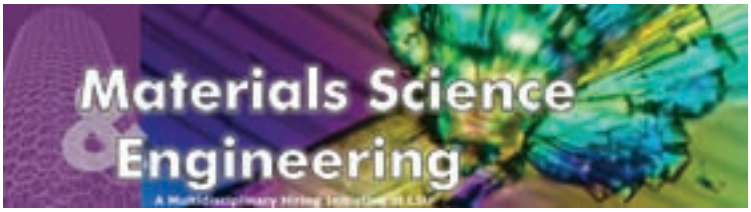
Clarence L. Newton, B.S.EE 1957, Henderson, Kentucky

"Dr. Voorhies was a real fine person. Of all the instructors, he was one of the best. I enjoyed knowing him and was glad to make a donation in his honor. I remember him real well."

J.C. Pittman, B.S.EE 1936, Harahan

We invite anyone who knew Michel Voorhies in whatever capacity, and particularly his family of students, to contribute your recollections to our picture of this great man. Please e-mail **tvabshire@lsu.edu** or write to Tammy Abshire, 102 Electrical Engineering Bldg., Baton Rouge, LA 70803 and share your stories.

New MHIs Uphold LSU's Flagship Agenda, Interconnecting Colleges, Disciplines and Goals



Faculty from the ECE Department have been involved in forming three of the five Multiple Hire Initiatives (MHI), a new hiring initiative launched by the University to promote interdisciplinary research. MHI programs have important national implications resonating with local issues and development. Research areas chosen will receive increased funding and resources necessary to expand faculty collaboration through new hires.

The new Arts, Visualization, Advanced Technologies and Research (AVATAR) MHI will focus its research on the world of modern media. Baton Rouge is gaining a reputation as a host for new digital entertainment, film and interactive media endeavors, and AVATAR will spur economic development in these areas, helping to create a new local job market for ECE graduates.

ECE is currently participating in two of the three MHI programs. The Materials Science MHI, a step towards establishing a Materials Science and Engineering Center (MSEC), aims to expand analysis and theoretical understanding of basic properties and applications of novel materials. The initiative's goal is the design and production of innovative devices. The Computational Science MHI explores the modeling of complex and vital natural processes. These processes include areas important to the future of Louisiana, such as hurricane behavior, coastal erosion and human social systems. The Computational Science MHI will also foster economic development by enhancing the talent and Information Technology (IT) skills of our workforce.

For more information on LSU's MHI's visit

Faculty Serve as Leaders Worldwide

Leszek S. Czarnecki, Fellow IEEE and Alfredo M. Lopez Distinguished Professor, served in June 2008, as a Chairman of the International School of Nonsinusoidal Currents and Compensation, ISNCC 2008. Dr. Herb Ginn and Dr. Veronica Bohorquez, both of whom received their Ph.D. degrees from the ECE Department at LSU, participated in the Conference. Half of the Conference time was allocated to tutorials, main concepts of power theory and compensation in electrical systems in the presence of harmonics, all presented by inventors or major contributors.

Daniel S. Katz has been appointed adjunct associate professor with the ECE Department and concurrently holds an appointment with the Center for Computation & Technology. He serves as program co-chair for the 6th International Symposium on Parallel and Distributed Processing and Applications (ISPA08), Sydney, Australia, December 2008; program co-chair of the International Symposium on Grid Computing, High Performance and Distributed Applications (GADA08); program vice chair (applications): 9th IEEE/ACM International Conference on Grid Computing (Grid 2008), Tokyo, Japan, September 2008; program vice chair (HPC applications): 9th IEEE International Conference on Computational Science and Engineering, San Paulo, Brazil, June 2008; and was general chair: 15th Mardi Gras Conference, Baton Rouge, Louisiana, January 2008.

Fund for Innovation in Engineering Research

Two ECE faculty members have been awarded funding from the College of Engineering's Fund for Innovation in Engineering Research, a new initiative that provides seed money to researchers to launch their research projects and allow them to build their case for more substantial funding. The ultimate goal of the initiative is to encourage a more rigorous and enhanced learning experience for both faculty and students.

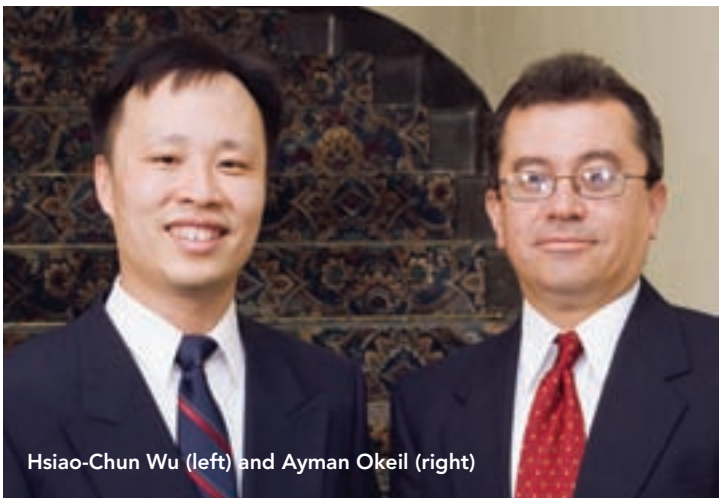
Assistant Professor **Jin-Woo Choi** will receive $20,000 to fund his proposal entitled *Nanowire Networks for Bioelectronic Sensor Applications*. His research explores conductive polymer-based nanowire networks for bioelectronic sensor applications with a goal of developing flexible bioelectrodes. The resulting techniques will have application in implantable biomedical microdevices and smart biomedical sensor systems.

Associate Professor **Hsiao-Chun Wu**, in partnership with civil & environmental engineering assistant professor **Ayman Okeil**, will study *Nondestructive Imaging of Highly Stressed Zones Using Phased Array Ultrasonic Signals* through a grant of $20,000. They propose to use new technology to create a special ultrasonic testing system to identify high stress zones in structures. Motivated by the recent failures of civil infrastructure, such as the collapse of the I-35 bridge in Minneapolis, as well as other system failures, their ultimate goal is to help ensure safe transportation and production systems.

In the spirit of LSU alumni generosity, the family of **Harry J. Longwell**, through the Longwell Family Foundation, funded this new initiative.

"The College of Engineering wants to create a robust and vibrant research program that enhances teaching so that new ideas – and their inventions, development and application for industry use – generated by the College – naturally fall back into the teaching process to benefit current students," said Harry J. Longwell. "Ultimately, this will make LSU more attractive for new students and faculty."

Jin-Woo Choi (left) with benefactor Harry J. Longwell (right)



Hsiao-Chun Wu (left) and Ayman Okeil (right)

LSU ECE Part of $15.7 Million Research Grant

A team of science and engineering researchers at Louisiana State University (LSU), Louisiana Tech University (LaTech) and Grambling State University are among 24 recipients of advanced science and engineering grants announced in March by the U.S. Department of Defense. In all, grants to researchers at the two dozen institutions totaled $15.7 million, according to the Pentagon release.

This new award to Louisiana is aimed at research work in the area of cyber warfare, predicted to bring $761,368 in research dollars to Louisiana. Professor **Sitharama Iyengar**, chairman of the Computer Science Department at the LSU System's main campus, will lead this research project entitled "Secure and Survivable Cyber-centric Sensor Networks: Algorithms and Architecture Research," for the Office of Naval Research in the period 2008-2011. LSU ECE's Professor **Hsiao-Chun Wu** is one of the co-principal investigators in this research team. The proposed research will aim to design a novel intelligent sensor network to serve the military warfare needs and will play a crucial role in future U.S. Navy maneuvers in the three-dimensional battlefield.

IN MEMORIAM

Former ECE faculty member, **Dr. David E. Johnson**, passed away September 4 at the age of 81. Johnson retired from the Electrical Engineering Department in 1983 after twenty years of service before joining the mathematics department at Birmingham-Southern College, where he worked for eleven years. He is survived by his wife of 49 years, Frances, and four children: Stephen, Nancy, Mercedes and Katherine.

Shuangqing Wei Awarded Economic Development Assistantship

Assistant Professor **Shuangqing Wei** has been awarded one of 11 Economic Development Assistantships (EDA) by the LSU Graduate School.

Supported by the Board of Regents, the EDA carries a stipend of $25,000 annually. These awards are for recruiting superior graduate students who can demonstrate that their study has a direct impact on the economic development of Louisiana. The selected student will work under Wei's supervision on research problems related with wireless physical layer security issues, such as anti-jamming and wiretapping, which is becoming more critical in wireless networks.

Wei's research has also received funding by the National Science Foundation's Pilot Funding for New Research (Pfund) Program under Louisiana's EPSCoR (Experimental Program to Stimulate Competitive Research) award.

Mark Rabalais Receives Teaching Award

Instructor **Mark Rabalais** was chosen to receive the 2008 Tiger Athletic Foundation (TAF) Undergraduate Teaching Award for his demonstrated excellence in instruction. Rabalais received the prestigious honor at this year's Distinguished Faculty Awards Reception on May 6, 2008; one of only three engineering faculty members selected to receive the Teaching Award. Recipients of the TAF Undergraduate Teaching Award are rewarded with a $1,000 stipend.

Before joining LSU's ECE teaching staff in 2000, Rabalais served in the U.S. Navy as an electronics technician and nuclear reactor operator until 1990. He then went on to earn a B.S. in 1995 and an M.S. in 1998, both in physics, at the University of Southwestern Louisiana, now named the University of Louisiana at Lafayette. He also received an M.S. in electrical engineering from the University of Texas at Dallas in 1999. Rabalais currently serves as instructor for three EE undergraduate courses: Circuits 2, Comprehensive Electrical Engineering and Electric and Magnetic Fields.

New Faculty

Georgios Veronis joined the ECE Department as an assistant professor in January 2008. Veronis, a Greek native, earned both his master's and doctoral degrees in electrical engineering at Stanford University, where he worked as an engineering research associate until joining LSU this year. Veronis' research interests focus on phototonics, specifically the theory and simulation of photonic materials and devices, nanoscale photonic devices, plasmonics, and computational electromagnetics.

Veronis holds a joint appointment with ECE and the Center for Computation & Technology (CCT). CCT, one of LSU's many interdisciplinary research centers, promotes economic development in Louisiana by applying computational science to further research and development for the benefit of both academia and industry, and in the process, raises LSU's profile as Louisiana's flagship research institution. Veronis also works closely with LSU's Hearne Institute for Theoretical Physics, another multidisciplinary research center whose pioneering work revolves principally around gravitational physics and quantum technologies.

FOREVER LSU Update

As you may have heard, the University has embarked on the largest, most ambitious fundraising campaign in the history of LSU. Culminating in 2010, LSU's 150th anniversary, FOREVER LSU: The Campaign for Louisiana State University, seeks to position LSU as one of the leading public institutions in the nation as supported by the National Flagship Agenda. FOREVER LSU is a commitment to growth, sustainability, diversity and excellence in every aspect of research and education, and uncovering pragmatic applications for theoretical breakthroughs that can improve our world today.

This historic effort gives you the opportunity to demonstrate or renew your support for the ECE Department through a FOREVER LSU gift earmarked for one of two critical investment priorities: improving academic excellence, and making transformational change. Each priority also presents unique naming opportunities, summarized below, for whereby donors can leave their own marks of pride for our emerging engineers to admire and follow. We are making great progress but we need your help.

With an initial goal of significantly boosting the Department's capacity through the ECE Revitalization Program, and an ultimate goal of naming the Department at $10 million, gifts from alumni and friends will:

- Encourage students to perform their best through scholarships,
- Encourage top undergraduate students to pursue engineering graduate education through support provided by fellowships and graduate assistantships;
- Recruit and retain top faculty through endowed professorships and chairs by offering competitive start-up packages;
- Upgrade aging laboratories and purchase equipment to advance both research and teaching programs to stay competitive with current technology and knowledge.

Interested in helping support students at LSU?

ECE Campaign Steering Committee

The ECE Campaign Steering Committee continues to assist in the Department's fundraising efforts by providing volunteer leadership and their own philanthropic investment. The Department wishes to thank the following committee members for their time, energy and support.

Leslie "Les" Broussard, Chair
Karen Brack
Joseph "Joe" Domino
William "Bill" Higgins
Edwin "Burt" McNeil

To schedule an informal appointment or obtain more information, please contact

Tammy V. Abshire
Associate Director of Development and Communications
102F Electrical Engineering Building
(225) 578-5478 · tvabshire@lsu.edu

Contributions can also be made via secure Internet transaction at **www.lsufoundation.org/give-online.php**.

IMPROVING ACADEMIC EXCELLENCE

Student Support

Endowed Scholarships for Engineering Excellence (10)
$40,000 ea

Non-endowed 4-yr. Graduate Fellowships for Engineering Excellence (5)
$60,000 (+ $60,000 dept. match)

Fellowship for Engineering Excellence (1)
$500,000

Faculty Support

Chairs (2) **$2 million ea**
($1.2 gift + $800,000 state match)

Distinguished Professorships (2)
$300,000 ea
($180,000 gift + $120,000 state match)

Infrastructure

Laboratory upgrade and establishment:
$5 million (estimate)

BioMEMS, Computer, Controls, DSP, Electronics Materials and Devices, Microprossesor, Nanostructured Materials and Devices, Senior Design

TRANSFORMATIONAL CHANGE

Laboratory Investment

(several) $100,000 min

Strategic Long-Term Program Investment

Naming of ECE Department
(in perpetuity) $10 million

Naming of Electrical Engineering Program
$3 million

Naming of Computer Engineering Program
$3 million

Naming of Digital Media Initiative
$2 million

Naming of ECE Capstone Design Program
$1 million

Chauvin Scholarship Seeks to Set Off a Green Wave in ECE

Alden J. and Barbara Scharfe Chauvin have recently established a new endowed scholarship in ECE which creates and funds opportunities for engineering students and directly encourages development of alternative energy solutions. This new scholarship seeks to support the "green wave" which the College of Engineering must champion through research and education, not only to achieve the aims of our Flagship Agenda, but most importantly for the benefit of the planet.

ECE will award the Alden J. and Barbara S. Chauvin Endowed Scholarship to one or more full-time ECE students who maintain a 3.0 overall grade point average for all college-level work. This scholarship is designated for native Louisianians, or for students with at least one Louisiana native parent. The award will also consider the financial need of potential recipients. Most significantly, students who have expressed an interest in a career in alternative energy solutions will have preferential consideration. By setting a precedent with its alternative emphasis, this scholarship aims to catapult ECE into the future of energy resource development and management. It provides a forward-thinking model which other donors may use to channel academic support into various applications that make tomorrow possible, and greener, for all. Chauvin recently stated, "I am very thankful for the excellent, well-rounded education that LSU provided me. It enabled me to capitalize on the opportunities that came my way during my career. I look at this scholarship as a way to give back in some small way to help prepare the next generation in driving the alternative energy revolution that will lead our country toward energy independence."

Now retired, Norco native Alden Chauvin built his professional career in the sales and marketing discipline of the semiconductor industry. Alden earned a Bachelor of Science degree in Industrial Technology in 1969 and from 1969 until 1986, he worked for semiconductor giant Texas Instruments, Inc. in capacities ranging from engineering to sales management. Between 1986 and his retirement in 2007, Alden had sales leadership roles at Sierra Semiconductor, a one year ex-pat assignment with a Singapore Technologies company, Elantec Corporation, and Intersil Corporation. In 2007, he retired as Vice President of Worldwide Sales from Intersil. He is currently on the Board of Directors of Leadis Technology, a semiconductor company based in Sunnyvale, California and resides in San Jose.

Barbara is the former Barbara Scharfe from New Orleans. She earned her Bachelor of Science degree in Medical Technology in 1971 and worked in private labs in both generalist and microbiology fields while raising four children. Now grown, the Chauvin progeny live in San Francisco and San Jose, California. The couple has one grandchild and is expecting their second.

Alden and Barbara are avid LSU sports fans. In the fall you can find them rooting on the Tigers in the real Death Valley (not to be confused with the one in California)!

DeSouza Brings Enhanced Knowledge and Exciting New Tools to ECE

In April 2008, ECE Instructor **Gabriel DeSouza** attended a workshop on Field Programmable Gate Arrays (FPGAs) in Albuquerque, New Mexico held by the FPGA Mission Assurance Center. In recognition of DeSouza's participation, the FPGA Mission Assurance Center donated ten advanced Xilinx FPGA boards to the ECE Department to assist in teaching LSU students the intricacies of FPGA design and implementation, including architecture, floor plan and global timing constraints. The generously-donated boards are valued at $1,500.

DeSouza is an LSU double alumnus and eight-year ECE faculty member who is currently pursuing his Ph.D. while serving as Instructor of Digital Circuits and Assembly Language in ECE. He also supervises the Digital and Microprocessor Interfacing I and II laboratories. His doctoral research focuses on prescriptive neural networks.

ECE RF/Communications Lab Named for Burt & Norma McNeil

In recognition of their generosity, the ECE Department is proud to announce the naming of the Edwin "Burt" & Norma S. McNeil Radio Frequency (RF)/Communications Laboratory. This experimental laboratory, located in the Engineering Research & Development Building, facilitates the conduct of signal-transmission experiments for EE students studying the workings of communications technologies that are used in cellular telephones and Internet connections. EE students perform these experiments under the direction of Dr. **Mort Naraghi-Pour** and **John Scalzo**.

Edwin "Burt" McNeil is a 1946 EE graduate and Exxon retiree. The McNeils' generous support has made possible many educational enhancements in ECE, including the Edwin B. & Norma S. McNeil Distinguished Professorship established in 1997 and expanded to the Distinguished level in 2000. The naming of the RF/Communications laboratory honors their dedication and philanthropic legacy.

The Guidry Foundation Marks Another Milestone for ECE

Mark and Carolyn Guidry, familiar names among the most active supporters of the College of Engineering, recently made another generous gift of $110,000 to the College. When matched by the Louisiana State Board of Regents, their latest donation will total $150,000. The majority of the Guidry's most recent philanthropy will directly benefit programs and facilities in ECE. Approximately $100,000 of that donation will increase the Carolyn Campbell and Mark Guidry Professorship in ECE to $200,000, an honor and title currently held by **Dr. Kemin Zhou**. Of the remaining funds, $40,000 will be dedicated to the upgrade and enhancement projects of the ECE revitalization fund, and $10,000 will be placed in the Dean's Discretionary Account.

Mark Guidry, PhD, and Carolyn Campbell, MSCE, are truly a match made at ECE, as well as a model for alumni philanthropic commitment. A native of New Orleans, Mark met and fell in love with Carolyn, an aspiring engineer from Hattiesburg, Mississippi, at LSU. Both were undergraduates earning their BSEE and balancing active student involvement with difficult coursework. They married one week after graduation. Dr. & Mrs. Guidry raised three children, all of whom followed the engineering path. And they have also built illustrious careers in research at LSU and other universities. Moreover, they have each enjoyed successes in semi-conductor and computer engineering, and technology R&D, at major firms such as, Boeing, Fairchild, Texas Instruments and Hewlett Packard. The couple also founded two landmark companies—Simon Software, a semiconductor design software enterprise which was merged with another company and is now a public corporation and the leader in its field; and Avasem Corporation, a semiconductor product development company credited with the first single-chip timing generator. Avasem was also merged with another company. The combined company today is the leader in the field of electronic timing generators.

Carolyn retired in 1988, and Mark in 1994. Carolyn's commitment to education and the arts led her to create the Mark & Carolyn Guidry Foundation in 1993, over which she presides and Mark serves as secretary. In recognition of their life achievements and notable philanthropy at LSU, this exemplary alumni couple was inducted into the College of Engineering Hall of Distinction in 2001. Their enduring generosity supports the Carolyn Campbell & Mark Guidry Professorship here in ECE as well as many other initiatives in the College of Engineering. They currently reside on Bainbridge Island, Washington.

Industrial Specialty Contractors Builds a New Legacy in ECE

Jerry Rispone (ECE '85), president and chief operations manager of ISC, and member of the ECE Advisory Board, established a new endowed professorship in ECE, made possible through the generosity of ISC and a match from the Louisiana State Board of Regents Support Fund.

ISC donated $60,000 to fund the ISC Endowed Professorship in Electrical & Computer Engineering, and the Board of Regents will add $40,000 for a total endowment of $100,000. "The creation of this professorship was prompted by my desire to give back to the alma mater that I truly cherish. It is our hope that the fund will provide the academic support necessary to a faculty member who demonstrates a commitment to perpetuating engineering education," said Rispone. ISC's vision for the new endowed professorship focuses on academic support for graduate students in the Department, and extending the enhancement of learning opportunities for all ECE scholars. Rispone spearheaded the effort for this commitment, which gives an academic and financial boost to ECE's current growth.

ISC, named one of the nation's largest industrial electrical contractors by Engineering News Record, records annual revenues of approximately $200,000,000. Co-founded by Rispone in Baton Rouge and headquartered here today, ISC now has corporate offices in Houston and Beaumont, Texas, and directly employs approximately 1,600 associates. The corporation provides a full range of services including construction, engineering and maintenance to domestic and international clients in the chemical processing, petrochemical, power, pulp & paper and refining industries. ISC's safety record ranks among the industry's most outstanding, and its legacy of philanthropy and community involvement continues to build with this latest commitment to excellence in ECE.

ECE Creates Full-Time Development/ Communications Position

Tammy Vieira Abshire, a familiar name in LSU development, returned to the College of Engineering in December 2007 to take over a new position as associate director of development and communications in the Department of Electrical & Computer Engineering. She has also assumed responsibilities for alumni communications and the development work that Don Eisenberg previously handled for ECE, allowing him to concentrate exclusively on development for mechanical engineering and civil & environmental engineering. In the process, ECE gained a dedicated and innovative development officer with proven abilities, plus 13 years experience at LSU.

Abshire, a proud double alumna, began her career at LSU as an undergraduate, first earning a Bachelor's Degree in Education in 1995, then continuing on to earn a Master's in Social Work in 2001. The new position is an opportunity to combine her talent for creative communications with her enthusiasm to help her alma mater raise its profile as a nationally recognized research institution, and achieve the goals of the FOREVER LSU Campaign.

WE WANT TO HEAR FROM YOU!

Please take a moment to let us know where you are and how you are doing. The ECE alumni website is being revised and suggestions are welcome as we transform the site into YOUR alumni page. Visit us at www.ece.lsu.edu/alumni to provide up-to-date contact information necessary for keeping you informed of exciting developments taking place in LSU's ECE Department. You may also use the enclosed envelope to submit your current information. We look forward to hearing from you!

Donor Generosity Benefits ECE Department Revitalization

This year, the ECE Department's Revitalization Program included expenditures on teaching equipment and graduate assistantships. A total of $33,000 has been spent on enhancing teaching facilities, including new equipment for the Power, BioMEMS (bio-micro-electromechanical systems), and Microcontroller Laboratories, as well as some specialized GPU workstations. Additionally, $15,000 is to be spent enhancing the value of teaching assistantships through graduate supplements. These expenditures were made possible by the generosity of the Department's expanding network of donors.

Donor Recognition

Thanks to everyone who supported the ECE Department this year!
(Donors listed below have made contributions to the ECE Department between July 1, 2007 – June 30, 2008.)

Individual Gifts

(Degree Year/Name)

1936 Mr. Richard F. Fenton, Jr.
1940 Mrs. Mildred V. Menton
1942 Mrs. Hilda S. Stoffel
1946 Mr. & Mrs. Edwin B. McNeil
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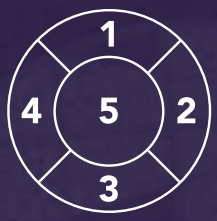
The ECE Connection cover graphic is a terrazzo mosaic on the foyer floor of the Electrical Engineering Building. Designed by Dunn & Quinn Architects & Engineers, the graphic represents various contemporary elements in electrical engineering at the time the building was constructed in 1959. Special thanks to retired Professor **Robert Nethken** for assisting the Department in learning the history of the image.



1 Two radio antennas with the radio signal going between them: Radio transmission
2 The earth with lightening going to Ben Franklin's key on to a person
3 A turbine driving a motor driving a set of gears: Electrical to mechanical conversion.
4 A battery with a light bulb and a switch.
5 The face of an oscilloscope showing a sine wave.

Publishing Information

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Congratulations to computer engineering junior, **Paige Harris**, for her winning entry in the ECE Newsletter Renaming Contest.

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On the Cover:
LSU's Intelligent Ground Vehicle Competitor, "MikeRobot", this year's capstone project.