Garmin co-founder gives students highly needed resources for success

— by Emily Dye, KSU Foundation

Dr. Min Kao, of Garmin International, Inc., is naming four labs in the Phase IV building addition at the Kansas State University College of Engineering.

This latest gift is above and beyond the contributions that Dr. Kao has previously given in support of the K-State College of Engineering through sponsorship of electrical engineering, computer engineering and computer science scholarships, as well as improvements to the engineering facilities on campus.

Dr. Kao is a co-founder and the executive chairman of Gar- min Ltd., with U.S. headquarters located in Olathe, Kansas.

“I am appreciative of state and university leaders who have shown their commitment to making Kansas State University a great institution of higher learning for future engineers,” said Dr. Kao. “The university’s bold Phase IV addition to the College of Engineering demonstrates its commitment to the future of engineering, and I am delighted to sponsor the creation of these four engineering labs.”

The Dr. Min H. Kao Intro to Computer Engineering Lab will be used by 140 students each semester. It will give electrical and computer engineering (ECE) freshmen their first exposure to computer engineering fundamentals such as digital architecture and processors, using projects that allow students to discover the technology that enabled the growth in mobile devices in our society.

The Dr. Min H. Kao Microprocessor Lab will be home to the Microcomputer Systems Design course. All computer engineering students will take this class in their senior year as a culminating design experience to work with microprocessors for embedded applications. Students in the lab have the opportunity to have the experience in small teams.

The Dr. Min H. Kao ECE Computer Lab will be for all electrical and computer engineering (ECE) freshmen their first year of engineering. Planned courses for this lab include Design of Communications Circuits, Design of Microwave Circuits and Digital Radio Hardware Design. This lab also serves as a focal point for senior design experiences of ECE students in communications.

Dr. Kao's gracious gift will allow the ECE department to continue providing excellent laboratories for our students. This kind of investment further builds on our ability to attract the best students into ECE and produce outstanding graduates for the state of Kansas.”

— Don Gruenbacher
ECE department head

How you can help

To learn how you can invest in the people, places and programs of K-State engineering, please contact the development office at engineering@found.ksu.edu or 785-532-7609.

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We sincerely thank you all for your generosity and support.

Interested in supporting the K-State electrical and computer engineering program? Learn more at www.found.ksu.edu/give/ece.

*Please note that the text content is provided as an example and may not be a direct transcription of the actual document.*
ECE GRADUATES

M.S. and Ph.D. graduates

December 2014

Nayef Saleh Almobayan
Faleh Abdullah Alkhran
Amy Elizabeth Bartak
Xiongjie Dong
Liran Jiao
Randy Johanning
Dingyi Li
Fatu Diop Mbengu
Robert Mulla
Tin Nguyen
Brian Nicholas
Louise Nutter
Saheed Abdul Oseni
Shuo Ouyang
Joshua R. Reid
Steven James Rubenthaler
Ian Sobring
Chenyu Zheng
Faryad Darabi Sahneh
– Scoglio (Ph.D.)
Spreading Processes over Multilayer and Interconnected Networks

May 2015

Ali Mofleh Alshogeethri
Charles W Carlson
Andrew D. Fund
Hassan Hayat
Tai-Wen Ko
Phillip Anthony Kuehl
Stephanie Schmidt
Eric Jan Swanger
Monica Teresa Taba
Chenchen Wang
Ola Ali Al-Ta’Ani – Das (Ph.D.)
Quantum Circuit Synthesis Using Solovay-Kitaev Approximation and Optimization Techniques

Chen Jia – Warrens (Ph.D.)
Higher Level Learning Research for Linear System Class in Electrical Engineering

Mohammed Taj-Eldin – Kuhn, Natarajan (Ph.D.)
Wireless Body Area Networks for IntraSpace Suit Communications: Modeling, Measurements and Wearable Antennas

December 2014

B.S. graduates

Chenyu Zheng
Ian Sobering
Steven James Rubenthaler
Ian Sobring

May 2015

Katlint Marie Aschenbrenner, Topeka
Abdulkhaliq S. Alshehhi, Saadah Arabia
Joshua Beau Befort, Arkansas City
David Alan Bosomworth, White City
David Wayne Cooper, Chanute
Chris Andew Delpierre, Nashville, TN
William Luke Duren, Arkansas City
Thomas G. Ehlmann, St. Charles, MO
Andrew Robert Fangman, Ottawa
Ankush Gakhar, New Delhi, India
Hans D. Guthrie, Kansas City, MO
Christopher Andrew Hund, Wichita
Cody Wayne Kaufman, Wichita
Kevin Patrick Kleine, Prairie Village
Brandon William LaMar, Overland Park
Benjamin David Leuthold, Bern
Timothy Eric Lindstedt, Sedgwick
Wenda Liu, Changchun, China
Joshua Shawn Loyd, Newcave, Australia
Gregory Martin, Overland Park
Sean Logan Meier, Olathe
Garrett Sidney Peterson, Manhattan
Matthew P. Poteet, Westmoreland
James Patrick Remley, Concordia
Austin Ryan Staats, Garden City
Heath Allen Vincent, Norton
Te Xu, Nanchang, China

Mitch Snyder
named 2015 Alumni Fellow

Mitch Snyder, EE ’83, executive vice president, military business, Bell Helicopter, is one of 12 accomplished K-State alumni selected as 2015 Alumni Fellows.

A member of Bell Helicopter’s executive leadership team, Snyder was named executive vice president, military business, in April 2011. In his current role, he is responsible for providing strategic direction, overall management and performance for all government programs.

He also has served as vice president and program director for Bell Helicopter’s V-22 program, where he was responsible for the company’s commitments for the design, development, production and sustainment of the V-22. He also previously served as vice president, component operations and support, where he was responsible for leading the company’s Fort Worth, Texas, manufacturing centers, which produce transmissions, advanced composite structures, rotor blades and subassemblies for both military and commercial aircraft.

Prior to joining Bell Helicopter in 2004, Snyder held several leadership positions during his 21 years with Lockheed Martin, in engineering, business development, manufacturing and the F-16 program office. He also has more than 11 years of international experience with customers in Europe, Asia and the Middle East, including management of aircraft co-production efforts to achieve direct offset credits.

In addition to his B.S. in EE, he has also completed the Defense Institute for Security Assistance Management executive course. He and his wife, Molly, live in Fort Worth. They have three children: Jeremy, Cory and Elle.

What have you been up to?

Marcus Borhani, ’73 EE, ’76 MSEE, has been named to the Academy of the Department of Electrical and Computer Engineering in the College of Engineering at Texas Tech.

Electrical engineering alumni Don Ludlum recently passed away. He started and maintained one of the larger radiation detection instruments companies in the world, devices known for their ruggedness and reliability. For more on him, see ludlums.com/company/don-ludlum-founder as well as ludlums.com/images/stories/news_letters/Don%20Ludlum%20Story.pdf

We would like to feature alumni news in future issues of ECE Uplink. Please send an email to alumni_news@ece.ksu.edu with your latest news and accomplishments.

Alumni news
Schroeder

Hall of Fame inductee

Jim Schroeder, Leavenworth, Kansas, graduated from Kansas State University in 1963 with a degree in electrical engineering. Upon graduation, he joined Westinghouse Electric Corporation as a development engineer in the large power transformer division, later co-authoring the Great Western Manufacturing Company, Inc. in Leavenworth, the oldest continuous manufacturing company in the city. He retired in 2012, but remains with the company in an advisory position. Under his leadership, Great Western grew from a supplier of sifting equipment for the flour milling and cereal grain industry into one of the country’s leading manufacturers of quality control sifting equipment for the food processing industry. A longtime member of the International Association of Operative Millers, he is the recipient of its Allied Trades Award. In 1996, he was named Alumni Fellow of the College of Engineering and has served on the College of Engineering Advisory Council. Active in community affairs, Schroeder has served on numerous local boards including the Country Club Bank & Trust Co. and as president of the Cushing Hospital Board. He has two children and six grandchildren. His son, David, and late wife, Linda, are also K-State graduates.

Hernandez and Taluja

Professional Progress awardees

Gabriel Hernandez, Overland Park, Kansas, graduated from Kansas State University in 1995 with a degree in electrical engineering. He is a vice president in the transmission and distribution group at Burns & McDonnell, acting as its director of substation projects. Hernandez has more than 18 years of experience in the electrical transmission, distribution and substation industry in design, project management and business development. Hernandez will received his EMBA from the University of Missouri - Kansas City in 2015 and is a current member of the department of electrical engineering advisory council at K-State.

Nick Taluja, Southlake, Texas, graduated from Kansas State University in 1994 with dual degrees in computer engineering and mathematics. He also holds an M.S. in electrical engineering from Kansas State. Taluja is currently vice president of sales for SK Hynix, a global leader in semiconductor memory solutions, managing a team responsible for generating more than $3.5 billion in annual sales in the Americas. He has been with SK Hynix since mid-2013 prior to which he was vice president and general manager for the Americas for ST-Ericsson. Taluja holds three patents in the field of near-field communications for radio interference, security and power management used in mobile devices, and credit cards for payment applications. For the past 18 years, he has held various positions ranging from sales, business development, product management and general management with Texas Instruments, TranSwitch and ST-Ericsson in Dallas-Fort Worth, Boston, San Diego, San Francisco and Nice, France.

Soldan retires

The College of Engineering recognizes Professor David L. Soldan for 29 years of dedicated service at Kansas State University in the areas of electrical engineering and computer engineering. He was the head of electrical and computer engineering from 1989 to 2004. Soldan received a BSEE in 1969, MSEE in 1976, and Ph.D. in engineering in 1980, all from Kansas State University.

Soldan has been a truly outstanding educator and one of the key leaders of both undergraduate programs in electrical and computer engineering. Areas of his excellent contributions have been in teaching, leadership in undergraduate program development, and development and supervision of assessment practices in the department. As department head, he helped lead the effort to develop the computer engineering curriculum in the late 1980s. Soldan has consistently taught the introductory course in computer engineering, of late with approximately 300 students each year. Soldan receives top student evaluations for both this course and the second course in digital design he teaches to juniors in computer engineering. Soldan also chaired the IEEE Computer Society Taskforce that developed the first computer engineering model program. In addition to curriculum development, he has been an expert on best practices in assessment for both departmental programs and programs throughout the College of Engineering. His vast experience in multiple positions with ABET has made him invaluable to ECE programs in terms of best practices for accreditation. Soldan has also played an active role in new initiatives in educational programs, including spearheading successful grants from the National Science Foundation to introduce the practice of learning communities for all of ECE students, as well as finding efficient and supportive pathways for military veterans to obtain a degree in electrical or computer engineering.

Know a potential electrical and computer engineering student? Send his or her contact information to us at undergraduate@ece.ksu.edu. Please include the student’s first and last name, home address, phone number and name of high school.

You are cordially invited to the ECE Annual Banquet

Friday, Sept. 25, 2015 • K-State Alumni Center

For more details or to RSVP, send e-mail to rsvp@ece.ksu.edu
**Faculty spotlight**

- Behrooz Mirafzal, ECE, has been promoted to associate professor.
- Bala Natarajan, ECE, presented an invited lecture on the Internet and the power grid at the Queensland Chapter of the IEEE Power and Energy Society in Australia. He also presented an invited workshop at the 2015 Research Week at Gujarat Technological University in India, as well as a lecture for graduate students at the A.D. Patel Institute of Technology in India.
- Anil Pahwa, ECE, has been recognized by Distrubt, Inc. for 25 years of dedicated service as a founding member of its advisory committee.
- David Thompson, ECE, was honored at the recent All-University Awards Celebration with the K-State Mentoring Fellowship.
- Sergio Curto, ECE postdoctoral research associate, received a Young Investigator Award from the Society for Thermal Medicine for his work on a wearable microwave hyperthermia system.
- Stephen Dyer, ECE, has been ratified as vice president-publications for the IEEE Systems Council, whose membership includes 11 IEEE technical societies.
- Caterina Scoglio, ECE, was an invited speaker at the School of Science and Engineering of Tulane University in April.

**ECE WELCOMES PROFESSOR TIM BURG**

Timothy Burg has extensive experience in industrial applications of robotics and nonlinear control design techniques, and the academic investigation of the basis and future directions of these techniques. He moved to Kansas State University in August 2014, having formerly been on the faculty at Clemson University.

**ECE awardee announced**

Yvonne Bachura, received the 2014 College of Engineering University Support Staff Employee of the Year Award for her outstanding performance for and dedication to the department of electrical and computer engineering.

**ECE Funding Fundamentals**

At a recent ECE advisory council meeting, it became apparent that most alumni did not understand the funding allocation for the ECE department. The chart at left illustrates a one-year snapshot of resources the department received in the past fiscal year. The vast majority of the budget is set by faculty and staff salaries, most of which are covered by funding from the state. We currently have approximately $70K in additional faculty and staff salaries not covered by state funds. Other primary sources of funding are 1) distance education, 2) research overhead (SRO), 3) student equipment fees, and 4) gifts from alumni and corporations (Foundation). These sources are used to support the cost of running our academic enterprise including 1) student teams and organizations; 2) undergraduate mentors, graders and laboratory assistants; 3) support for new faculty; 4) equipment and technology for laboratories and offices; 5) professional development and travel for faculty and students; and 6) general operating expenses such as phones, paper and supplies. Besides student equipment fees, the revenue stream into ECE does not change with enrollment.

As can be seen, there is little to no flexibility in the annual budget. As we try to increase recruitment and retention activities in the department, support of alumni and friends truly makes a huge difference. The department is most grateful for having such a dedicated alumni base.
Over the last decade, K-State’s engineering programs have experienced tremendous growth. To better accommodate this growth and prepare students for the future, we are constructing the final phase of the Durland/Rathbone/Fiedler complex — an additional 108,000 square feet of space. This urgent fundraising priority will keep us moving forward with world-class facilities that give our students a place to learn, our researchers a place to develop cutting-edge breakthroughs and our industry partners an innovative environment in which to flourish. We invite your investment to not only help complete a structure, but to help create opportunity, innovation and, most importantly, tomorrow’s global leaders.

The following list highlights the generosity and dedication of donors who have contributed to the Phase IV project of the College of Engineering:

- Bartak Family Assistant Dean of Recruitment Office
- Sidney M. Bedford Jr. Aerospace Electronics Research Laboratory
- Coen Family Collaboration Teaming Room
- James Michael Duncan, MD Meeting Room
- Exxon Mobil Computer Lab – invested by K-State Engineering alumni
- Donald Gemaehlich ECE Advisors Office
- Gabriel Hernandez Teaming Room
- Carl and Mary Ice Reception Center
- Min H. Kao Computer Engineering Lab
- Min H. Kao Communications Circuit Lab
- Min H. Kao ECE Computer Lab
- Min H. Kao Microprocessor Lab
- Thayne and Leona Kraus Teaming Room I and II
- Hummels Lenhert Innovation Lab
- Alan and Jan Levin Student Design Team Suite
- Edmond R. and Janice D. Murray Family Interactive Gallery
- Thomas and Connie Paulson Conference Room
- Cathy and Tom Ritter Collaborative Teaming Room
- Jesse and Sabrina Schriner Electrical and Computer Engineering Department Head Office
- G. Rhea and Pat Serpan Teaming Room
- Doug and Connie Sterbenz Collaboration Teaming Room
- James P. and Deborah A. Stonehocker Distance Learning Control Center
- The Sunderland Foundation Electrical and Computer Engineering Reception Area
- Leland O. and Duane O. Townley Graduate Research Area
- Ed and Eunice Wambgsanss Collaboration Teaming Room
- John H. and Jill Weidman Wireless Communications Research Lab
- Jerry and Robin Westhoff Collaboration Teaming Room

Contact the engineering development team at engineering@found.ksu.edu or call 785-532-7609 to learn more about the naming opportunities in Phase IV.

Visit engg.ksu.edu/phaseiv