

INDUSTRIAL & SYSTEMS ENGINEERING

ISE NEWS

FALL 2011

WWW.ISE.UFL.EDU



THE GATOR NATION IS EVERYWHERE

UF | UNIVERSITY of
FLORIDA

CHAIRMAN'S COLUMN



Dear Alumni and Friends,

As we are now well into the new academic year, I hope this letter finds you well. There is a lot of excitement around here this fall. (And I am not just talking about fans fired up for Gator football!)

First, *U.S. News and World Report* released its new undergraduate rankings. For programs in which the doctorate is the highest degree offered, Industrial and Systems Engineering at the University of Florida was ranked 12th overall and 10th among public institutions. While we try not to get wrapped up too much in rankings, it is nice to be noticed by our peers (the ranking is purely based on peer assessment). This is the highest ranking that our undergraduate program has received according to our records dating back to the early 1990s. The College of Engineering was ranked 27th overall and 18th among public institutions.

Second, an internal University of Florida study of doctoral programs resulted in ISE receiving the highest ranking of "A". The taskforce analyzed information including the number of students and graduates; percentage of minority students; admittance and matriculation rates; time to degree; attrition and completion rates; and the number of students per graduate faculty member. In the College, Chemical Engineering and Materials Science and Engineering also received the highest scores. The President announced a major initiative to improve the doctoral programs at UF – we have stepped up our recruiting efforts as we have found that competition is growing for the top students. You can read about our newest Ph.D. graduates in this issue – and you will see that they are making an impact across the country. We are very proud of their accomplishments.

Third, our programs continue to grow in popularity. Last year at this time, I reported that our official undergraduate enrollment had reached 434 undergraduates, the highest total in well over a decade. We have now reached 524 students! This includes over 40 incoming freshmen declaring ISE, the highest number of incoming students to our program since 2000. Our graduate enrollments remain steady (mid 200s for master's programs and just over 50 doctoral students). In addition, the Outreach Engineering Management (OEM) program that started in Orlando this past August is at full capacity. It is great to be a Gator ISE!

Fourth, our Department continues to receive a needed makeover. This summer, we completed renovating Weil 401 (Center for Applied Optimization) and Weil 406 and 406A (new graduate office space) – thank you again to the Dudziak-McClintock family for making this possible. A number of you came by to see the new rooms (along with a vastly improved hallway with new flooring!) and our plans to renovate Weil 405 as new undergraduate student space – with generous gifts from Procter & Gamble, Rockwell Collins and Walt Disney World Resorts & Parks. So if you are in Gainesville, please drop by and see the improvements.

Fifth, we are doing a much better job of staying in touch with you! In addition to receiving this newsletter, you are receiving monthly e-newsletters from our students and our newly updated website (www.ise.ufl.edu) brings you news updates on a weekly basis. Please check in and follow your ISE Gators (and join our alumni group on LinkedIn, www.linkedin.com, if you have not already).

Sixth (and finally), we are making a significant push to expand international opportunities for our students. Thanks to the foresight of Emeritus Professor Jack Elzinga, a handful of our students spend a spring in France studying a variety of topics. Through our faculty efforts and those of the college, we are taking recent efforts in innovation (see our previous spring newsletter) and moving them to a global scale. Agreements are in place with Technion University in Israel and another is to be signed with Zhejiang University in Hangzhou, China. Further developments are expected in the Netherlands and Brazil. We also expect to develop programs with Zhengzhou University (ZZU) in the Henan Province of China.

I made my first trip to China this summer, taking in Shanghai, Zhengzhou, Xi'an and Beijing. I was amazed by what I saw, as the contrasts were extreme – between the historical and modern, between the quiet countryside and bustling cities, and between the high-speed trains and common bicycle transport. I am thrilled that we will be making it possible for our students to experience China and its growing economy while progressing towards their degrees.

More details about the new programs are highlighted in this newsletter, which features our international endeavors, as faculty, students and alumni. Our students report on their study abroad experiences while we highlight a number of alumni that have made impacts throughout the world. Enjoy the read!

So you can see why we are a bit excited around here – there are a lot of good things going on and much for us, and you, to be proud. Please continue to share your stories with us – we love hearing from our alumni and friends. If you have an update, please feel free to contact me (392-352-1464, ext. 2002; hartman@ise.ufl.edu) or Tasha Martin, our Director of Development (392-352-1464, ext 2055; tlmartin@eng.ufl.edu). You are always welcome to drop by when in Gainesville.

GO GATORS!

Sincerely,

A handwritten signature in black ink, appearing to read "J.C. Hartman". The signature is stylized with a large, sweeping initial "J" and a long horizontal line extending to the right.

Joseph C. Hartman
Professor and Chair

DEPARTMENT UPDATES



Alumni Take in Renovations

A number of alumni made it back to campus for the Tennessee game in September and also took a glimpse at the newly renovated Center for Applied Optimization (Weil Hall Room 401) and Computational and Stochastic Optimization Lab (Room 413). Rooms 406 and 406A were also revamped to account for growth in graduate programs. These renovations were made possible through the generosity of the Dudziak-McClintock family. Plans for a new undergraduate student lounge, study area and space for student organizations are currently underway thanks to funding from Procter & Gamble, Rockwell Collins and Walt Disney World Parks & Resorts.

U.S. News and World Report Ranks Undergraduate Program

U.S. News and World Report released its annual rankings of undergraduate programs. In the Industrial/Manufacturing category, the UF ISE program was ranked 12th overall and 10th among public institutions. The College of Engineering was ranked 27th among all engineering colleges in the United States where the doctorate is the highest degree conferred and 18th among public institutions. The department programs were ranked solely on a peer assessment survey conducted in the spring of 2011.

Students Start Sales Group

ISE students Patrick Gallagher, Liz Krall, Angela Daly and others have started the Technical Sales Engineering Society. The mission of the student group is to enable students, from all technical backgrounds, to explore the field of sales as a career mainly through interactions with professionals in the field. The sales group meshes well with the mission of the Sales Engineering Minor, which the ISE Department administers. You can read more about this group in the spring newsletter.

New OEM Class Diverse with Talent

The 15th class of the Outreach Engineering Management, or OEM, program started this past August, meeting monthly in Orlando, Florida. The program leads to the M.S. or M.E. in Industrial and Systems Engineering with the Engineering Management Option. Many participants stay with the university for an additional year and complete an M.B.A. through the concurrent degree option. The Class of 2013 is comprised of 56 students from a variety of academic and professional backgrounds. The average age is 30 and the average amount of professional work experience is 7.5 years. The students represent 33 different employers, with Lockheed Martin, Siemens Energy, Harris Corporation and the U.S. Military represented by multiple students. Contact Ms. Patsy Messenger (messenger@ise.ufl.edu) to learn more about the program.

Three Undergrads Named Gator Attribute Award Winners

ISE Seniors Elizabeth Gillett, Cortland Russell and Andrew Vittetoe each received "Attributes of a Gator Engineer, Recognition Award" from the College of Engineering at the New Student Convocation held in the O'Connell Center on Friday, August 19. Undergraduate and graduate students were named winners for each of the following attributes: Creativity, Integrity, Leadership, Professional Excellence, and Service to the Global Community. Gillett, a Past President of Alpha Pi Mu that worked for GE Aviation this summer, was named the winner for Integrity. Vittetoe, Past President of the IIE Student Chapter, founder of the INFORMS student chapter and intern with Goldman Sachs this summer, was named the winner for Leadership. Russell, winner of Service to the Global Community, is extremely active with the College of Engineering Ambassadors. He hopes to use his engineering background to create societal change in developing nations.



PARSONS HEADED DOWN THE RIGHT TRACK

One thing was clear: Devon Parsons knew that he wanted to work in the railroad industry after he graduated from the University of Florida. What he did not know was how he was going to achieve that goal,

"I wanted to attend a large school that offered limitless opportunities, and once I focused on engineering, UF was the top ranked school in the state."

explained Parsons. "I had initially wanted to study Civil Engineering with a focus on transportation and UF was the clear choice pending my application acceptance."

But once he arrived on campus, that all changed. "After talking to the student teachers, I realized the major offered the perfect combination of analytic engineering and adept business skills required for my career interests," said Parsons. "I determined that no other engineering field offered the same horizontal grasp in conjunction with the necessary business skills to succeed at a managerial level, such as decision support systems and extensive project work with diverse groups of people."

After a summer with Frito Lay North America in 2009, he pursued his lifelong interest in the railroading industry and has spent two internships with General Electric Transportation. The first was as a Lean Manufacturing Intern in Erie, Pennsylvania, working in the Locomotive Final Assembly, Paint and Test group. He spent this past summer in Selkirk, New York as a Global Service Operations Intern at the CSXT Locomotive Shop. He improved operations and supervised over 20 employees in the maintenance and inspection areas.

"Modern locomotives are extremely technically advanced in all aspects from the mechanical to electrical systems," explained Parsons. "As an industrial engineer, I have the education to

understand these technical machines and relate the systems and associated data to current business problems facing our team in order to facilitate effective decisions. I have always been passionate about railroad operations and ISE allows the ability to not only view the engineering and logistics side but also provides the background to manage and lead people."

Eager not to lose him, GE has kept him on into the fall semester – working out of GE's Jacksonville office one day a week on the CSX locomotive services account. This is quite a feat, because Parsons is very active when he is on campus. He has twice served as a Vice President for the Institute of Industrial Engineers (IIE), was extremely involved in the IIE Southeast Student Regional Conference (and probably why its logo was "Fast Track to the Future"), produced the moving video for the ISE 75th Anniversary, and is a founding member and current chair of the ISE Ambassadors.

"I found becoming deeply involved in these organizations was the best way to convey information to the college population at large about ISE and the bountiful opportunities available to students, no matter their passion or interest," admitted Parsons. "I thoroughly enjoy providing the resources to fellow students to chase their own passion and personal career goals."

Mind you, there is more to Parsons than ISE and trains. The Tampa native loves to travel, which motivated him to study abroad in Sophia Antipolis, France (just west of Nice on the French Riviera) at SKEMA Bachelor's this past spring semester. "My study abroad experience unparalleled," Parsons beamed. "I wanted to attempt living in a different culture while immersed in a new language and have the ability to travel thoroughly while doing so."

This was further motivation to work for GE – as he would like the opportunity to work internationally some day. Until then, he'll enjoy his time in ISE – which is expected to last for another year.

PH.D. GRADUATES



Shuang Chen



Neng Fan

SHUANG CHEN

Hometown: Fujian, China

Schooling: Beijing University of Aeronautics and Astronautics

Dissertation: "Optimization Models for Service and Delivery Planning." (Advisor: Dr. Joseph Geunes)

Current Position: Operations Research Analyst at Bank of America (Dallas, TX)

Personal: "Lots of great memories from my time in UF: my dreams started here, my happy married life also began here.....those are memories that I'll cherish forever!"

NENG FAN

Hometown: Shiyuan, Hubei Province, China

Schooling: Nankai University in Tianjin, China

Dissertation: "Combinatorial and Nonlinear Optimization Methods with Applications in Data Clustering, Biclustering and Power Systems." (Advisor: Dr. Panos Pardalos)

Current Position: Post doctoral research associate at Sandia National Laboratories

Personal: "Now I am working on applying operations research in power systems modeling and optimization, and smart grid!"

DINCER KONUR

Hometown: Istanbul, Turkey

Schooling: Bilkent University in Istanbul, Turkey

Dissertation: "Mathematical Models of Competition with Explicit Cost Considerations in Supply Chains." (Advisor: Dr. Joseph Geunes)

Current Position: Research Fellow at the Intermodal Freight Transportation Institute, University of Memphis.

Personal: "I like the blues (music) here, but I will come there every now and then to see some Gators."

EHSAN SALARI

Hometown: Mashhad, Iran

Schooling: Sharif University of Technology in Tehran, Iran

Dissertation: "Integrating Delivery Issues in Intensity-Modulated Radiation Therapy Treatment Plan Optimization." (Advisor: Dr. Edwin Romeijn)

Current Position: Postdoctoral research fellow at Massachusetts General Hospital and Harvard Medical School.

Personal: "My time at the University of Florida has been one of the most intellectually stimulating and enjoyable phase of my life. I am proud to be part of the Gator Nation."

SIQIAN SHEN

Hometown: Fujian, China

Schooling: Tsinghua University in Beijing, China

Dissertation: "Reformulation and Cutting-Plane Approaches for Solving Two-Stage Optimization and Network Interdiction Problems." (Advisor: Dr. J. Cole Smith)

Current Position: Assistant Professor of Industrial and Operations Engineering at the University of Michigan.

Personal: "I feel I made the best decision of applying for the PhD program in ISE at UF, and spent the most pleasant four years that I could imagine in Gainesville. The town is awesome, satisfying all my personal hobbies of sports, traveling, photography, planting (not gardening), and dining! I'm proud to be a Florida Gator!"

ALEXANDER VEREMYEV

Hometown: Moscow, Russia

Schooling: Moscow State University, Moscow, Russia.

Dissertation: "Modeling and Optimization Approaches for Ensuring Robustness in Networked and Financial Systems." (Advisor: Dr. Stan Uryasev, Co-Advisor: Vladimir Boginski)

Current Position: Post doctoral research associate at REEF, ISE, UF.

Personal: "I love working for the ISE department so much that I cannot leave it!"

PETROS XANTHOPOULOS

Hometown: Heraclion, Crete (Greece)

Schooling: Technical University of Crete (Greece)

Dissertation: "Robust Data Mining with Applications to Biomedicine and Engineering." (Advisor: Dr. Panos Pardalos)

Current Position: Assistant Professor of Industrial Engineering and Management Systems at the University of Central Florida.

Personal: "Currently I am enjoying not being a student. It is the first time since I was 7!"

JICONG ZHANG

Hometown: Wuhan, China

Schooling: Tsinghua University in Beijing, China

Dissertation: "Optimization and Data Mining in Healthcare: Patients Classification and Epileptic Brain State Transition Study Using Dynamic Measures, Pattern Recognition and Network Modeling." (Advisor: Dr. Panos Pardalos)

Current Position: Postdoctoral Research Fellow in Department of Neurology & Neurosurgery, Johns Hopkins School of Medicine / The Johns Hopkins Hospital.

Personal: "I like basketball and travel, and miss the winters in Florida. Go Gators!"



Dincer Konur



Ehsan Salari



Siqian Shen



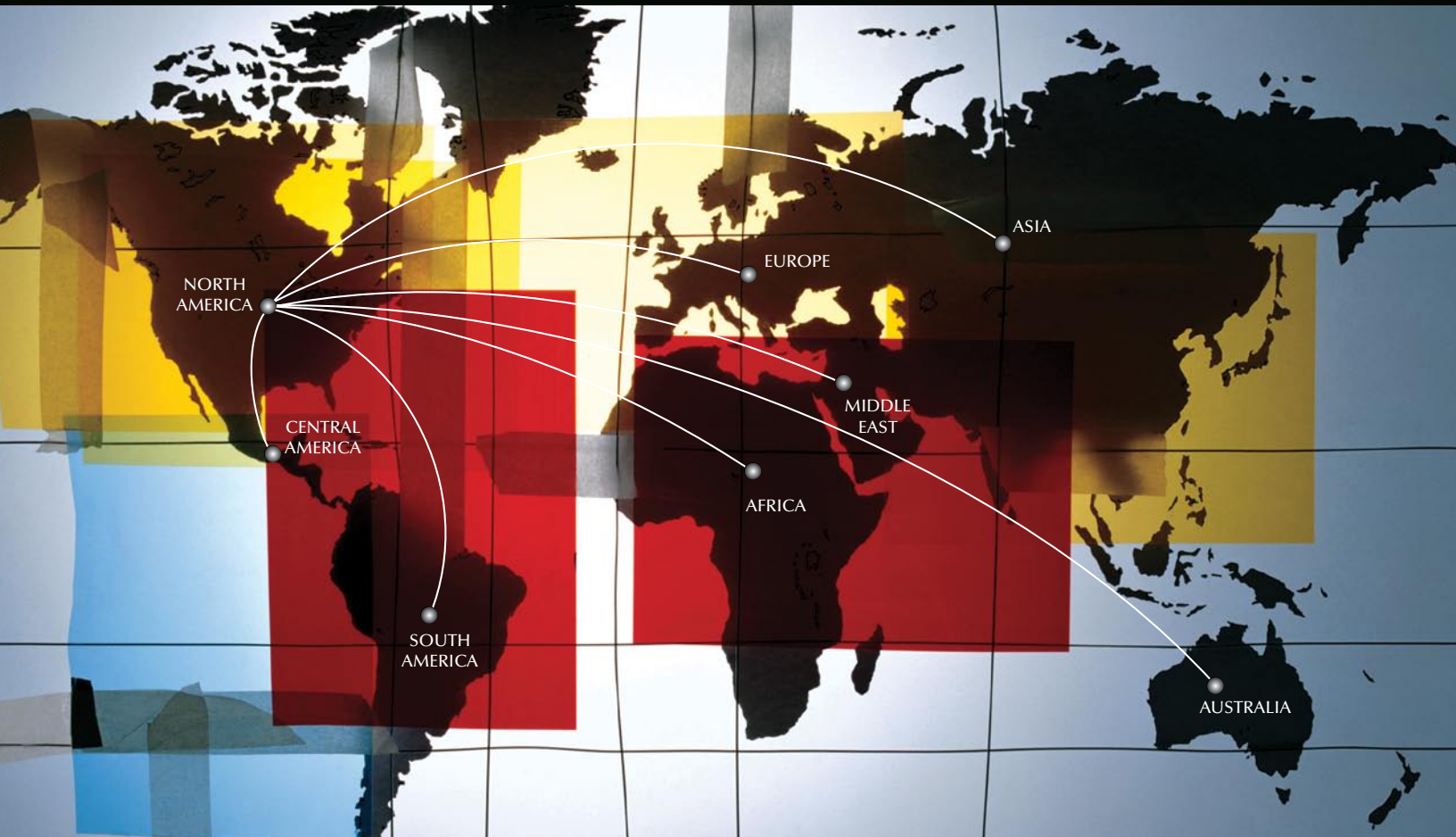
Alexander Veremyev



Petros Xanthopoulos

international ISE

Industrial and Systems Engineering is a discipline studied and practiced throughout the world. You can see it in our faculty and our students! The list below gives you a sense how international our program has become.



Undergraduates

United States – 434
Argentina – 2
Austria – 1
Bolivia – 1
Belarus – 1
Brazil – 2
Canada – 1
Chile – 1
Columbia – 13
Costa Rica – 1
Mexico – 2
Netherlands – 1
Peru – 5

Panama – 1
Cuba – 2
Dominican Republic – 2
Ecuador – 1
French Guiana – 2
Germany – 1
Guatemala – 1
Philippines – 1
Puerto Rico – 1
Switzerland – 1
Turkey – 1
Haiti – 1
Indonesia – 1
Israel – 1

Jamaica – 1
Lebanon – 1
Mongolia – 1
United Kingdom – 1
United States – 434
Venezuela – 28

MS/ME Students

Argentina – 1
Brazil – 1
China – 20
Cyprus – 1
Ecuador – 1

France – 2
India – 23
Ivory Coast – 1
Jamaica – 3
South Korea – 1
Mexico – 3
Pakistan – 1
Puerto Rico – 4
Thailand – 1
Turkey – 3
Taiwan – 6
United States – 119
Saudi Arabia – 1

PhD Students

China – 10
Colombia – 2
Ecuador – 1
Greece – 1
India – 5
Iran – 6
Russia – 7
Saudi Arabia – 2
Singapore – 1
South Korea – 1
Turkey – 6
Ukraine – 1

United States – 7
Vietnam – 3

Faculty

Belgium – 1
China – 3
Greece – 1
India – 1
Russia – 1
Serbia – 1
Thailand – 1
Turkey – 3
Ukraine – 1
United States – 4



Jack Elzinga



Hangzhou, China



Technion (Israel Institute of Technology), Haifa

International Options Growing for ISE Students

There are a number of study abroad options available to UF students, with dozens listed on the International Center's website. The adjoining page shows that our current students have studied in Europe, Australia, Central America, Africa and Asia. Our program in France is now in its 12th year! We are looking to expand these opportunities for our students. To this aim, the college is initiating a global network to expand its innovation opportunities for students and faculty.

College Initiating Global Innovation Network

With the objectives of preparing its graduates for the increased internationalization of engineering practice and leveraging existing strengths in education in innovation, the University of Florida (UF) College of Engineering (COE) is committed to developing international certificate and minor programs intentionally designed around the theme of "global innovation." Targeted for undergraduate students, the Gator Engineering Global Innovation Network (GE-GIN) involves a series of required experiences at UF or at the Technion Israel Institute of Technology, International School of Engineering in Haifa, Israel ideally each year they are enrolled at UF in engineering.

Ranked in the top 30 in the world in engineering, the Technion International School of Engineering (www.ise.technion.ac.il) provides an enriching opportunity for students to work in state-of-the-art research facilities with distinguished faculty on a campus that offers a wide variety of opportunities. Because of existing innovation and research programs, the Technion is a natural partner in collaborative innovation efforts. The Technion T3 (www.t3.technion.ac.il) is a commercialization arm of the Technion Research and Development Foundation, providing expertise in IP development rights, patenting and licensing inventions, and forming win-win business agreements. The Technion Seed Incubator (www.technionseed.co.il) is a partnership of four venture capitalist companies, Vertax, Battery Ventures, Vitalife and Proseed, who invest in up to 5 companies each year. The Technion Energy Program (tep.technion.ac.il) unites a multidisciplinary team of science and engineering researchers who are seeking to discover and exploit alternative and renewable energy sources, non-carbon-based fuels, efficient energy solutions, and methods to reduce the production and burning of fossil fuels.

Beginning in 2012, approximately forty engineering courses will be offered by the Technion to study abroad engineering students of different majors. The Study Abroad program at the Technion well-developed and offers students opportunities to study on the Haifa campus for a semester, a summer, a year, or an extended period of time as students work towards their full degree. The program also

provides students the opportunity to learn about Israel and its people through planned field trips, activities, and special events.

The program will involve three categories of students: (1) those who pursue a semester-long study abroad experience at the Technion; (2) those pursuing a four-year certificate in Global Innovation; and (3) those who pursue a four-year minor in Global Innovation. Students of the first category will seek more traditional study abroad experiences at the Technion during its spring semester (February-July). These students would be able to select from the suite of engineering-related courses offered in English and, if appropriate, would be able to substitute any of these courses for relevant UF courses. Students of the second category would be provided an experience involving global innovation concepts ideally each year of their enrollment culminating in 12 hours of in-class and experiential learning. Students of the third category who seek a minor in Global Innovation will take 15 total credit hours of coursework over the four years of their undergraduate experience.

While the initial agreement is with the Technion, plans are underway to also enable similar experiences in China, the Netherlands and Brazil. The school currently targeted in China is Zhejiang University, or ZJU, which is located in located approximately 100 miles southwest of Shanghai in the city of Hangzhou in the Zhejiang Province. The university is one of China's oldest, having been founded in 1897, and is considered one of its best. Programs at ZJU are expected to commence in 2012.

French Program Still Strong: The Riviera Never Grows Old

Each spring, a number of UF students – with a high percentage from ISE – head to Sophia Antipolis on the French Riviera to study at SKEMA Bachelors. The program was initiated by (now) Emeritus Professor Jack Elzinga after the Presidents of UF and the European-American Institute of Technology (EAI) signed a general Memorandum of Understanding in 1998 to initiate joint programs.

EAI existed within CERAM (Center for Education and Research in Advanced Management), which is now SKEMA (which is not an acronym). EAI was a two-year institution with instruction in English that prepared students to transfer to U.S. universities to complete their degrees. Three students came from France in 2000, with two in Engineering and one in Business. Elzinga was designated the program's advisor by UF's International Center and remains so to this day. He taught in CERAM in both 1998 and 2001.

A total of 42 UF students have studied in France, many of them ISE students. They study for one full semester (usually spring) and generally take courses to complete their Business Minor. A number of students that have participated in the program are highlighted in this newsletter.



STUDENT STUDIES ABROAD

Nicole Giovanni

I studied abroad last spring in Sophia Antipolis, France at the SKEMA Business School. My courses included Production and Operations Management, Corporate Finance, French, and Photography. The POM class covered TQM, process selection, Pert diagrams, Critical Path Methods, determining project duration and crashing a project. Corporate finance was an equivalent course to Business Finance for my Business Administration minor and POM counted as a tech elective.

Matthew Jonas

This past spring, I studied abroad at the SKEMA Business School and took Management, Marketing, Corporate Finance and photography. I traveled to see the entire French Riviera, Paris, Italy (Ventimiglia, Genoa, Venice for Carnivale, and Rome), Prague, Brussels, Amsterdam, London, Glasgow, Dublin, and Switzerland (Interlaken, Zurich, and Geneva). By seeing so much of Europe, I really got an amazing understanding for how each country differs more or less...how everyday life goes, work mentalities, and just landscape in general. I loved every second that I was there, and am very happy I decided to go.

Europe



Maria A. Pena

I studied abroad this past semester in France. I took two technical electives, Marketing and Business Research, and then took French and Photography for personal interest. For that reason my graduation was "delayed" a semester and I will now graduate this December and then continue with the combined degree program for my Masters here at UF. The experience was amazing! I did a lot of traveling throughout Europe and had an awesome time!

Robert Ferrari

I studied abroad in the summer of 2009 in Madrid, Spain with the Warrington College of Business. I took two online

courses and two courses at the local Universidad Antonio de Nebrija. The university organized quite a few excursions and we got to know some students from other universities in the US who studied abroad at the same institution. Traveling with other students from UF made me feel like I was never alone. I got to know a few citizens from Madrid like my roommates at the apartment as well as others at the local parks. We learned Spanish grammar as well as Spanish culture in our classes at the institution. It is a good experience for someone who has never left the country before, but it was not my first time.

Jaime Hinckson

I had the opportunity to study abroad in Barcelona, Spain for the summer 2009 semester. The experience was amazing and, aside from the artistic structures in the city, I was able to travel to nearby cities like Pamplona for the San Fermin Festival (running of the bulls). I took a business course that went towards my technical elective requirement and an advanced Spanish course to keep up with the upbeat culture. I have pictures GALORE!

Nathan Kenney

I studied abroad in Malaga, Spain this summer for 5 weeks (from the end of April through the end of May). I took 6 credit hours of Spanish classes while I was there. These credit hours were put towards the Spanish minor I am planning on receiving.

Brittany Morgan

I studied abroad this past summer with a program through International Studies Abroad (ISA), an independent study abroad company. The program I completed was a Spanish Language, Culture, and Business in English Program in Seville, Spain. With the program, we had excursions to Madrid, Toledo, Cordoba, Granada, Jerez de la Frontera, and Cadiz. I also visited Lagos, Portugal and Paris, France independently. I was also able to complete an "intercambio" or "exchange" with a Spanish student from Seville where I was able to practice my Spanish with her and she was able to practice her English with me. This was a once in a lifetime experience! I highly recommend this program to other students and encourage other students to study abroad.

Jennifer Oxilien

I studied abroad in Madrid, Spain this past Summer. I took Spanish Culture, Spanish Conversation, Art History, and ENT3000 (Principles of Entrepreneurship). I traveled all over Spain taking what we learned in class into the real world. I beyond enjoyed my experience.

Fernando Plat

During Spring of 2009, I studied abroad in Barcelona with the program API at the Universitat Autonoma de Barcelona. I took MAN3025, SPN3472 and SPN3572. I had a great time and traveled through Europe. I recommend this experience to everyone.

Tiago A. Schulz

I went to Spain to study abroad this last summer, taking five weeks of courses at the Universidad de Malaga and after two weeks at CILE. I covered courses from A2-B2 (European level system), in addition to a culture class, a communications class and about 160 hours of Spanish.

Bilbao, Spain



Melbourne, Australia



France-Eiffel Tower



SKEMA Business School

Christina Sheperd

I studied abroad at International University in Germany in Spring 2009 through a UF Exchange program. The school was located in Bruchsal, Germany and had about 150 students with three degree options. While there, I took two business classes (Finance and Management) and three electives (Cultural Interactions, German I, and Web Programming). I had the opportunity to travel various places on the weekends, including two school-sponsored day trips. It was a great experience and a great university.

Jamie Mann

I took part in UF in Mérida and UF in South Africa as a part of the Lombardi Scholars Program.

The former partnered UF and Universidad Autónoma de Yucatán, at which we studied Spanish and Anthropology and Ecology of the Yucatán Peninsula in the summer of 2008. South Africa was two weeks in the summer of 2011 with the University of Pretoria studying South African History and Contemporary South African Politics and Society, plus a week in Cape Town.

Gabriel Eisen

Last Spring, I participated in a study abroad program in Melbourne, Australia at the Royal Melbourne Institute of Technology. I took Principles of Management, Business Finance, Photography and Introduction to Australian Society. In addition to that I took the opportunity to travel to Sydney, Kangaroo Island, Tasmania Island, The Outback, the Gold Coast and went on a spring break trip from Brisbane all the way up the coast to Cairns. The experience was indescribable and much recommended to other students! It is a great opportunity to learn about other cultures while being surrounded by them, and in my opinion, it would open the eyes of many students and show them how different other humans interact with each other and the way they live their lives.

Zack Chang

I did a study abroad the summer of 2010 in Taipei Taiwan at the I did a study abroad the summer of 2010 in Taipei Taiwan at the National Taiwan Normal University. There, I took Mandarin Classes for Mandarin Speakers as well as various cultural classes. The Mandarin Classes were comprised of speaking, reading, and writing. It was from the month of May to the middle of June.

Phillip Cheng

I enrolled in Nanyang Technological University Spring 2011, Singapore, as part of the study abroad program. I took Intro to Human Resource Management, Living with Mathematics, Popular Culture and Korean.

Elizabeth Gillett

I participated in the GREEN program in Costa Rica because virtually anyone can fit a 12-day program into their schedule. It further develops concepts mentioned in Energy Management but delves into renewable and sustainable energy portions much more thoroughly. GREEN offers a dynamic education where students aren't just learning in a classroom but are submersed 5 plant site visits and 4 additional sustainable and renewable energy tours. Topics covered include but are not limited to: Biomass, Solar, Wind, Hydro-electric, and Geo-Thermal Energies. Moreover, GREEN is a cultural experience from adventure to community service, enveloped in a capstone project.



FRENCH STUDENT PURSUING ISE DEGREE AT UF

We have had a number of ISE students that study abroad at SKEMA Bachelor's in France each year, but Adrien Fedida is the first from that school to study ISE at UF. SKEMA does not have an Industrial and Systems Engineering program, so he studied Aerospace Engineering for his first two years of college.

He then looked into schools in Australia and England, as well as Virginia Tech and Florida, to continue his studies. He met with Emeritus Professor Jack Elzinga to explore options at UF. "I chose UF because we were able to establish a good plan to come here," said Fedida. "And it fit better for what I want to do." Ultimately, Fedida would like to get an advanced degree in Financial Engineering.

He is currently taking engineering economy, macroeconomics, statistics and humanities. One month into the program, he is getting adjusted to the educational style here. "I never had a multiple choice quiz in France," Fedida said with a laugh. As for going to school at UF, Fedida describes it as a "surprise." UF is a bit of a culture shock, as his home school has only 500 students and one building compared to 50,000 students spread over a sprawling campus. But he loves the fact that he has met other students from all over the world, as well as plenty from Florida. He is currently living with three other students from SKEMA – studying environmental science, management and journalism.

Gainesville was not Fedida's first trip to the United States. He visited New York City when he was 15. On that trip, a stranger gave him a card and an interview – which eventually led to a 10-month span as a runway model for business suits and clothing. Asked if it was hard to walk away from the glamour, he says "no" emphatically. "My plan was to get a degree in engineering," he said.

Outside of the classroom, he enjoys playing golf and tennis and has been traveling. He also joined the MASCOT program, where he spends time each week visiting middle schools speaking to and mentoring children. "I wanted to do something separate from engineering," he said of the experience.

In all, Fedida is enjoying his time in Gainesville. In fact, his plan is to complete his year of exchange and then transfer into the ISE program to complete his degree. "My overall experience has been great so far," he said with a smile.

ELLYSON GROWS WITH CHINA

If you visit China today, you will see a bustling economy, high speed rail, five star hotels and consumers with personal wealth that is growing. So it is hard to believe that when Scott Ellyson started his venture into Shenzhen, China in 1995 that he had to sleep on the factory floor and eat protein bars for meals because there wasn't a decent hotel or restaurant nearby. But he gutted it out and now, as CEO of East West Manufacturing, he is reaping the benefits.



After graduation, Ellyson (BS ISE 1993) took short stints in quality control with Symbiosis in south Florida and supply chain management with PriceWaterhouseCoopers before uniting with his brother in China in 1996 to co-found ITS Ltd., an electronics manufacturer producing automotive components and electronic assemblies for tier-two suppliers in North America. The group started supplying circuit boards for Cadillacs and Buicks and eventually cruise control assemblies for Camrys and Corollas.

His brother wanted to expand using the Internet, but Ellyson sold his shares in ITS and became a Vice President of Offshore Manufacturing and Logistics for Diversitech, building their offshore division to supply the air conditioning industry. In 2001, he offered to take the division as a separate firm, eventually forming a joint partnership, and East West Manufacturing, a global contract manufacturer, was born.

"Our job is to work with customers and figure out what they do well and what we do well," explained Ellyson while delivering a lecture in the CIBER Multidisciplinary Luncheon Seminar on Friday, September 16. "We find savings so they can keep their competitive advantage."

The firm promises quality product with on-time delivery. It can do this because of the know-how that Ellyson has acquired over time, and the structure they have built. East West employs project engineers, a sales team, customer service representatives and logistics support in Georgia (and soon also Antwerp), manufacturing in China, Vietnam and soon to be India. They also have partner production facilities in Thailand and Taiwan, in addition to China, Vietnam and India. East West supplies three major industries:

(1) Engineered products with customers such as Electrolux, Johnson Controls and Briggs & Stratton; (2) OEM Motors with customers such as McQuay, Manitowoc and IEC; and (3) Industrial Supply with customers including Carrier, York and Nordyne.

Ellyson has seen the transformation of China over time. He describes the China of 15 years ago as the "Super Walmart of Manufacturing," because they could make anything, as long as it was not high-tech. But today, he notes that the "Chinese are realizing what quality is and they are willing to pay for it."

But China has its problems: a burgeoning population, corruption, inflation, unrest and pollution. And costs are on the rise. This reality has forced East West to open options in Vietnam, which allows for lower costs with the risks associated with lesser infrastructure and technical expertise.

Even with these challenges, Ellyson is growing East West, named the 14th fastest growing firm in Georgia with 50 engineers on staff and 500 world wide employees. They are delivering 5000 products on 2000 containers per year from 150 partner suppliers.

And Ellyson has not given up on manufacturing in America. But it will take some changes, like lowering the corporate tax rate, making the R&D credit permanent, fixing the patent process and having market based healthcare. He also wants to stop the brain drain, noting that today, a majority of foreigners return to their home country after receiving a graduate degree in the USA -- something that was rare years ago. To Ellyson, these are the real problems facing America. "If we could fix taxes and regulation, we could overcome high labor costs in the US," he ended, encouragingly.



Russia



Caracas, Venezuela



BYDLON FALLS BACK ON INTERNATIONAL EXPERIENCE

One day, Thad Bydlon (MS ISE 1978) was sitting in the Los Angeles corporate headquarters of ARCO, helping negotiate the energy company into Russia through a two-part investment partnership with LukOIL, Russia's largest oil company. This partnership included ARCO purchasing 8 percent of LukOIL and the establishment of a \$5 billion investment joint venture, where LukOIL brought ARCO oil prospects in and around the Caspian Sea and in the former Soviet Union countries. Seemingly the next day, he was asked to lead the American side of the partnership as First Vice President of the joint venture, LukARCO, moving to Russia in 1996.

It was an exciting time to head to the former Soviet Union. "We did significant business in Azerbaijan and Kazakhstan, including building the 900 mile Caspian Sea Pipeline from western Kazakhstan through Russia to the Black Sea," recalled Bydlon. "I was heavily involved in this project as well as numerous other oil acquisitions. We grew the company quickly over a 4-year period, committing to approximately \$7 billion in capital projects."

While these accomplishments are impressive, Bydlon is equally proud of a different legacy: building a new international school (elementary and high school) in Moscow. The school cost \$85 million to build and Bydlon led the financing effort, raising \$25 million from western firms and the remainder from European Banks. In addition to those funds, Bydlon negotiated a 99-year lease from Mayor Yuri Lushkov of the City of Moscow, for one Ruble. "It is a beautiful facility that is the envy of the international community," beamed Bydlon.

Living in Russia was an experience in itself, recalled Bydlon. "Russian was a crazy and wild place at that time," he said. "Certain food and drink was hard to find, and was really expensive. The Russian people, at first, were very distrusting of Americans, but we eventually won them over and I have many good friends there today."

In addition to living in a new country and overlooking operations in Russia, Azerbaijan, Kazakhstan and the Netherlands (the formal corporate headquarters were located there with mostly accounting and finance personnel), he had to navigate working in a joint partnership. "I was essentially joined at the hip with our Russian president in that we jointly had to make decisions on expenditures and personnel," Bydlon explained.

Having built that business successfully, Bydlon was asked to turn his talents to another region of the world, being named Vice President of Latin American Operations for ARCO, moving his family to Caracas, Venezuela. "The change in climate was welcomed," recalled Bydlon with a smile. He and the new President worked on changing the portfolio of that part of the company by divesting a number of underperforming assets. Ironically, his family lived approximately six blocks from ISE student Jose Benhamu, who interned with Bydlon this past summer at his current firm. (And his children attended the international school there.)

After two years in Venezuela, BP AMOCO took over ARCO. He helped integrate the companies and then left the firm and headed back to the United States. The changes in his career were numerous, as he left the world of big companies (before working for ARCO, he worked for AT&T Bell Laboratories after graduating from UF) and came back to Florida. After a number of stints as a Chief Financial Officer for small to medium technology firms (Telecomputing, Caerus/Volo Communications and F4W), Bydlon now serves as CFO with TEAM International. As the name implies, the company has a significant international presence. Unlike his previous experiences, Bydlon has not had to relocate abroad.

TEAM International is an offshore software development company that provides solutions to U.S. and European information technology organizations using its assets located throughout the world. They are currently in the Ukraine (which allows Bydlon to occasionally dust off his Russian) and "we expect to open an office in either Columbia or Chile in first quarter of 2012," said Bydlon.

Asked if his previous international experience has helped in these latest endeavors, Bydlon gives an emphatic yes. "All international experiences help you start up another company in a foreign land," he explained.

And he recommends students and others looking to make an impact take in an international experience, "preferably working and living over there for at least a couple of years," he elaborated. "If we are going to compete in a global market back here, we need to understand where we have competitive advantages; and where we don't."



MANY PEOPLE CONSIDER MOVING FOR WORK A HASSLE

The Browns call it a way of life



Paul Brown (BS ISE 1984) just started his new role as President of International Paper (IP), India this summer. He had previously served for two years as President of International Paper, Asia, living in Shanghai, China. In China, he oversaw a \$1.8 Billion unit of International Paper with 5 businesses in 8 countries and 8,600 employees in 30 manufacturing facilities.

India is one of the fastest growing markets for paper and packaging in the world and IP expects to have a significant presence in the market. IP is entering India through the acquisition of Andhra Pradesh Paper Mills and he will be responsible for overseeing this new business as well as all of IP's interests in India.

"India is full of surprises: it's exotic, colorful, and diverse and at times shocking," explained Brown. "Some things are modern and high tech (shops, restaurants, office buildings, architecture) and other aspects of daily life haven't changed in centuries (cows, water buffalo, goats and pigs in the streets; barefoot workers with loads balanced on their heads; a huge variety of tribal dress, dirt roads, and so on)."

"The good news is that the Indian middle class is emerging rapidly and most of the time you can be in a mall or a coffee shop or an office building and feel like you are in Gainesville or Memphis or anywhere U.S.A.," said Brown.

Paul began his overseas career in Paris, France in 2005 as Director, Operations for IP's Europe,

Middle East and Africa (IP EMEA) packaging division with 25 plants in France, Italy, Spain, Morocco and Turkey. He was then promoted to Vice President and General Manager of the division, a \$1 Billion business with 5,000 employees, and relocated to Brussels, Belgium. He ran the division for four years before moving to Shanghai.

"From a professional standpoint, I have been exposed to different mindsets about business, technology and problem solving," explained Brown. "For example, when I lived in Paris and then Brussels, I had 10 different European nationalities on my division leadership team. I was exposed to big differences in how different cultures go about solving problems."

In all, he has been with IP for 27 years in 10 different roles. He went to work with Union Camp Corporation (eventually purchased by IP in 1999) after graduation and began his career as a staff engineer responsible for environmental projects at the Corporate R&D Department in Princeton, New Jersey. He progressed through a number of roles in New Jersey, Alabama, Florida, Georgia and Virginia before heading to corporate headquarters (Memphis, Tennessee) in 1999.

"I believe that overseas experience of any type is valuable when you work for companies that do business outside the U.S.," said Brown. "The ultimate is to have a long-term experience outside the U.S. but even short-term project assignments overseas can help a professional broaden his or her skill-set and build a broader perspective."

His wife, Heidi (Shreves) Brown (BS ISE 1983), was recruited by General Electric into the Technical Marketing Program with training stints in Chicago, Philadelphia and Hendersonville, North Carolina. She then worked for GE Supply and GE Support Services in the Philadelphia and New Jersey area.

(continued on page 14)





IN THE FALL OF 2008, **GUILLERMO MORATORIO** had the world on a platter. He was starting his senior year in ISE with a 4.0 GPA and had recently won the IIE/UPS Minority Scholarship. He had served as President of the student chapters of both the Institute of Industrial Engineers and his social fraternity Sigma Pi. He had completed four internships with the likes of Intel and Disney. He was looking at plenty of offers from major corporations. What did he do? The unthinkable according to many: he volunteered for the Peace Corps. He returned this fall, and had this to say about it...



In June 2009, I joined the Peace Corps and flew to West Africa with the hopes of getting a two-year dose of the “life” side on the work/life balance. I was placed in a small town in the Northern Region of Ghana called Diare. Diare has about 12,000 people, electricity in some parts of the town, and no running water. While most people have a basic understanding of English, the main language spoken is Dagbani. The landscape is that of a grassy savannah dotted with gnarled-looking Shea Nut trees. I was responsible for teaching Math and ICT (a computer class) in the Diare Junior High School, which has about 120 students.

A typical day for me consisted of waking up around 6:00 in the morning. (I stopped setting an alarm after the first few months. The songbirds, goats, sheep, and roosters made sure to communicate that whether or not I was ready, the world was waking up around me.) Next came “bath time”. I would get a bucket from my house, go to the back of the compound to our rain-collection system, and fill the bucket for my bath. I became very good at staying clean with only a bucket of water, a small cup for pouring and a bar of soap.

The students assembled at 7:30 every morning. They would recite the national pledge, as well as their national anthem, God Bless Our Homeland Ghana. After this, classes would begin. A Ghanaian child’s education suffers from many issues: many teachers don’t accept postings to rural schools, and thus many schools are understaffed; teachers that do accept postings usually want to spend the weekends in larger cities, so they usually show up to school on Tuesday and leave on Thursday afternoons; and since most of these rural communities are farming communities, planting and harvesting takes precedence over school. As a result, the disparity between where the Ghana Education System syllabus

says these children should be, and where they are, is quite large. Probably the most tangible evidence of this is their English skills. Many of my classes were spent talking slowly and with very simple vocabulary, while trying to teach complex math topics of which they did not even possess a basic understanding. (At one point I deviated off of the syllabus completely, for an entire term, to teach elementary school topics. I could not teach linear algebraic equations if they did not know their times-tables, or how to add and subtract negative numbers.)

I don’t know if it was the heat (it gets well over 100°F there in the hot season and we didn’t have ceiling fans, much less air conditioning), or the exhaustion of communicating in “Ghanaian English”, but by the time school closed at 2:00, I needed a nap. I usually slept for an hour and then rode my bicycle two kilometers into town.

My best friend on site, Bubu, is also a teacher at the school. Every day after school, he would set up a stand in front of one of our town’s many mosques to sell credits for pay-as-you-go cell phones. Most of the friendships I made came from speaking in Dagbani to people as they came and went from the mosque for prayers. I knew nothing about Islam before I moved to Ghana, and the beauty of the call to prayer; the way everyone stopped what they were doing and headed towards the mosque, happily greeting as they passed, became one of my favorite parts of my service. I would usually sit at Bubu’s stand for a few hours and work on my Dagbani. I’d try out new phrases and words, and get laughed at quite often. (Ghanaians love to laugh. And it’s important to keep in mind that they’re hardly ever laughing at you.)

At about 6:30 p.m., the Weaver Birds in the huge tree across from Bubu’s stand would start to get loud with their yells to end the day.

They would enter their self-made houses and, like shift work, the bats would wake up. Hanging upside-down from the same tree that the birds had been working in all day, the bats would begin to stretch and flap their wings. Right at dusk, during the night's first call to prayer, the bats would take off and fly over my head as I greeted my friends on their way into the mosque.

At about 7:30 I would ride to the main station in town and greet my "fufu lady". Fufu is a traditional Ghanaian dish which consists of yams or cassava pounded into a dough-like ball, and served with a spicy soup. It's delicious. I ate Fufu at my site nearly every night, and greeting my fufu lady as she prepared her stand for the night's sales became a ritual for me. Before I ended my service she even taught me how to pound the fufu. I can't remember the last time I was so happy.

By 8:30 I usually started riding back to my house. On some cloudless nights, I would forget to watch the road because I was so distracted by the billions of stars in the ink-black sky. I'd never seen a night sky in Florida like the ones I saw in Diare. Most nights I was asleep before 9:00. I had no TV, Radio, or Internet, so I usually read for a while, or played some songs on my guitar. I taught myself to play guitar in Ghana. I'd always wanted to in the US, but never had the time.

I finished my Peace Corps service this summer. When I reflect on the two years I spent in Ghana, I've made a few observations that I hope to never forget. The people in my village never took vacations. The concept was just absurd. They worked with, and around, their friends every day, and each day they enjoyed their lives. Why would they need to go somewhere different and look at some statue instead? To me, there is something powerful in that. In the US, we tend to count-down to 5 o'clock, or Friday, or our next big vacation. In Diare, their life is their life. Work just happens to be something that happens during that time. The idea of enjoying every day, every moment, not just putting up with most days to celebrate the "special" days, is incredible. Vacations are great and travel is amazing, but that shouldn't be all you have to look forward to. You should enjoy the job you do every day. If you don't, get another one.

So that's the plan. I'm going to start a small business when I move back to the States, and have a main goal in my company's mission be that my employees actually enjoy the work that they do. Work is work, you can't get around that; but it should be as enjoyable and rewarding as possible. Successful businesses everywhere prove the secret that Ghanaians are hiding: people who enjoy their jobs work harder, and make the company more money. It's easier said than done, but it's worth a shot, and I'm excited to try.

I taught some kids in Ghana how to do long division. The people in my town taught me to reevaluate my definition of success. The Peace Corps was an experience that I will never forget, and I encourage anyone who's interested to take that leap, and learn a bit about themselves.

If you have any questions, feel free to email me at moratorio.guillermo@gmail.com.

Go Gators,
Guillermo



Taj Mahal

(Paul Brown story continued from page 12)

When they relocated to Alabama in 1989, she switched over to GE Aerospace in Huntsville. When GE moved to Florida, she took on a similar role at Chrysler Pentastar. She left the company, but stayed on as a consultant, with the birth of their daughter in 1993 and eventually retired when they relocated to Lakeland.

This summer, they relocated to Hyderabad, India – at least most of his family. Their daughter just graduated from Shanghai American School and started at the University of Pennsylvania this fall. Their son started 10th grade at the International School of Hyderabad. The school follows the British curriculum and is located on the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) campus. They are reminded of home with the UF logo on the marquee as a research partner.

"Heidi and I both lived overseas while growing up and we wanted our kids to have the same experience," said Brown. "There are a lot of advantages – we've learned to get by in other languages; we've traveled extensively; we've seen how business and life is conducted in ways that are very different from our American roots."

Of course, one must concede a number of comforts when living abroad, noted Brown. "We don't get to watch the Gators on T.V. or enjoy a hamburger or Mexican food when we feel like it, and our home goes without power frequently, food safety is an issue, personal security is required and we are not allowed to drive ourselves to work or to go shopping," he explained. "These are minor issues, however, when you realize the life experiences that you get by living in a different country. We read a lot of books and do a lot of research to help us immerse ourselves in the local culture. We've also chosen to live in local neighborhoods, away from other expats, as we seek the authentic experience."

So what do expats do when in need of a break and some fun? Travel, of course. They have visited over 65 countries, including some out-of-the-way places like Bosnia, North Korea and Zimbabwe. They encourage others to see the world.

"Experience in developing economies like Brazil, Russia, India and China is especially rewarding because these are the economies that will rival the U.S. economy in coming years," said Brown, encouragingly of our new study abroad program in China. "Companies want senior leaders who have seen the world and conducted business internationally and I believe professionals with international experience have a significant leg up in their career growth."

ALUMNI UPDATES

John Gibson (B IE 1969) and his wife now own The Medical Supply Group, an Internet medical supply company. They have a small office in Fort Lauderdale.

Paul Brown (BS ISE 1984) is now President of International Paper, India. He previously served in a similar capacity as President of International Paper, Asia in Shanghai, China.

Alain Cerf has completed an accurate, working replica of the first powered vehicle built by Joseph Cugnot in 1770, with the help of his son **Olivier Cerf** (BS ISE 1984). The car see picture is a finalist for the *International Historic Motoring Car* of the Year.

Luiz Steinberg (MS ISE 1992) has been named President and Chief Executive Officer of Modular Mining Systems, Inc. in Tucson, Arizona. Steinberg joined Modular in 1993.

Adam Plager (MS ISE 1995) is now a Principle at SABN Solutions, LLC. The group is focused on helping medium sized companies better manage their IT costs and firms in the energy industry deal with turnover (specifically, talented managers retiring without readily available replacements).

Gabriel Alcantara (BS ISE 2001) is now a Management Engineer in the Duke University Health System. He was previously with the Loyola University Health System outside of Chicago.

Art Chaovalitwongse (PhD 2003) is now Associate Professor of Industrial and Systems Engineering and Radiology at the University of Washington. He was previously at Rutgers.

Marisa (Arvesu) Farabaugh (BS ISE 2003) is now Director of Supply Chain Operations at Wake Forest Baptist Health in Winston Salem, North Carolina. She was formerly with Shands Healthcare in Gainesville.

Andres Gomez (BS ISE 2004) has joined CareCloud as Manager of Business Processes. He was formerly with Florida Power & Light.

Joey Canamo (BS ISE 2007) is currently an Industrial Engineer for Business Development & Quality Engineering at the Universal Orlando Resort. He was previously with Disney. He is also serving as the Host Chapter Chairperson for the 2012 Institute of Industrial Engineers Annual Conference to be held in Orlando.

Gregory Puckett (BS ISE 2009) is now an Operations Research Engineer for Assembly Test Technology Development - Factory Decision Support at Intel in Phoenix. He previously worked in Operational Decision Support Technology

Z. Caner Taskin (PhD 2009) and **Semra Agrali-Taskin** (PhD 2009) are happy to announce the birth of their son Ahmet Emre Taskin on September 12. Emre and Semra are doing great.

Jo Smith (BS ISE 2009) is now an "EE Business Leader - Black Belt II" with Cameron in Houston, Texas. She recently completed the Global Rotational Development Program.

Vivek Krishnaswamy (MS ISE 2009) is now a Project Engineer, Quality Assurance at Whirlpool Corporation in Cedar Rapids, Iowa. He has been with Whirlpool since 2009.

Arun Narayana (MS ISE 2010) has been promoted to Process Leader at d.e. Foxx & Associates. He has moved to Dallas to support the production-distribution center for the client Cintas.

Adam Cunningham (MS ISE 2011) is now a Lean Leader at GE Aviation in Jacksonville.

Jarrold Parrotta (MS ISE 2011) is now a Senior Electric / Controls Engineer at Louisiana Pacific Corporation outside of Nashville. He was formerly with Gerdau Ameristeel.



Taskin Family



First Powered Vehicle

SPEAKER ROLL CALL

Bob Alligood (BS IE 1960)
 Bob Bacchus (BS ISE 1987)
 Nancy Bray (BS ISE 1988)
 Alex Brown (BS ISE 2011)
 Donald Dunlap (BS ISE 1984)
 Trey Lauderdale (BS ISE 2004)
 Harmon Lewis (B IE 1970, ME ISE 1973)
 Roger Madariaga (BS SE 1973)
 Amanda Mann (MS ISE 2003)
 John Murnin (BS ISE 1979)
 James Neff (BS IE 1969)
 James F. Smith (B IE 1963, MSE 1964)
 Carlos del Sol (BS IE 1972)
 Jim Williams (BS ISE 1993)



SUMMER, 2011 GRADUATES

With this summer's graduation of 15 undergraduates, the Department conferred a total of 96 B.S. degrees in the 2010-11 academic year (fall, spring and summer). A total of 120 M.S. and M.E. degrees were conferred, with 13 this past summer. From our exit surveys, 75 percent of our students were headed to work by the fall at companies including established firms Amazon, Cameron, Campbell Soup, Lockheed Martin and Mitsubishi Heavy, and startups Fracture and Voalte. Lockheed Martin was the leader, hiring three graduates from this summer's class.

Note that seven Ph.D. students also completed their studies. They are profiled on page 5 in this newsletter.

B.S. in Industrial and Systems Engineering

Brown, Alexander R.	Morris, Cory Bruce
Cheng, Phillip	Saslafsky, Gabriel S.
McGowan, Drew	Schueller, Divik
Coen, Richard D.	Rodman, Alex M.
Fung Chung Kelly, Matthew	Suarez, Luz Amanda
Garcia, Andres Eduardo	Varn, Whitney Elizabeth
Kelly, Jarrod H.	Zhang, Jiawei
Latham, Taylor Bryant	

M.S./M.E. in Industrial and Systems Engineering

Alfaraj, Ali Hussian	Skandari, Mohammadre
Babb, Derrick Tobias	Woodrum, Michael J.
Bachelart, Baptiste	Wright, Jonathan D.
Feldman, Kenton A.	Bruce, David A.
Garg, Nitish	Lingenfelter, Andrew
Harris, Jonathan C.	
Jadhav, Manjeet Babe	
McCoy, Joseph T.	