

SPECIAL POINTS OF INTEREST:

- USD rises in rankings of 'Best Undergraduate Engineering Programs'
- Checking in with Edward Kaen
- Updates from more than 50 alumni!

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USD's Mechanical Engineering Program is Accredited by ABET!

University of San Diego's dual Bachelor of Arts/Bachelor of Science degree program in Mechanical Engineering has been accredited by the Engineering Accreditation Commission of ABET, Inc., the recognized accreditor of college and university programs in engineering, technology, computing, and applied science. Mechanical Engineering is the third USD engineering program to receive ABET accreditation. Accreditation is a voluntary, peer-review process that requires programs to undergo comprehensive, periodic evaluations to continue to maintain their status as ABET-accredited programs.

Because accreditation involves evaluation of the entire program curriculum, the first accreditation visit can occur only after the first class of program graduates completes the curriculum. As with the other two accredited programs in Electrical Engineering and Industrial & Systems Engineering, the Mechanical Engineering evaluation visit occurred as early as allowed, given this restriction, and the positive accreditation results apply to all graduates of the program, including the first class who completed the program during the year prior to the visit.

The evaluation for this accreditation was conducted in October 2007 by a team of professionals that included Dr. Gerald Jakubowski, President of Rose-Hulman Institute of Technology, Dr. Swami Karunamoorthy, Professor of Mechanical Engineering at Saint Louis University, and Dr. Darrell Pepper, Professor of Mechanical Engineering at UNLV. The evaluation focused on program curricula, faculty, facilities, institutional

(continued on page 4)

USD Engineering Ranked 21st!

US News & World Report's ranking of the best colleges just came out and our programs once again moved up in the rankings. We are now ranked 21st in their listing of 'Best Undergraduate Engineering Programs.' There are more than 300 institutions with accredited non-doctoral-granting engineering programs.

More than \$650,000 in NSF Awards to Engineering

Last year, Engineering faculty members were awarded six new grants totaling more than \$730,000. This is far and away the most ever awarded to Engineering in a single year. Four of these project awards were from the National Science Foundation. The projects span a breadth of topics including studying speech rec-

ognition, improving the manufacturing systems, awarding scholarships to transfer students, and several collaborative projects on engineering education. For more information on these exciting new projects, see page 8.



Scott Denton and the uProGPS Rangefinder

It's A Different Game With A Different Look At The Course - *Scott Denton Co-Founds uPlay*

Scott Denton (EE1997) co-founded uPlay, LLC, with partner Joesph Balardeta. Based out of Carlsbad, California, uPlay is an integrated products design company whose goal is to produce technically superior consumer electronics devices that are both innovative and fun. The company's greatest strength is its engineering design team and its ability to develop design solutions with the latest technology. Between them, Scott and his co-founder have over 25 years experience in the electronics and semiconductor industries. Scott graduated with his BS/BA in Electrical Engineering after completing his senior project focused on portable computing. Using the diverse EE

background gained at USD, Scott interned at Patriot Scientific working on a variety of projects from ground penetrating radar to ISDN terminal adapters. After graduation he went on to work in for semiconductor companies such as AMCC and Broadcom as a mixed signal design engineer.

This spring, uPlay introduced a new handheld GPS rangefinder, the uPro. It provides golfers the best of both GPS and laser technologies in a small, easy-to-use system. uPro features color imagery, detailed course lay-outs, video flyovers and aerial views of every hole on the course. The device is available from traditional golf retail locations as well as online at major sites such as Amazon.com.

Going to the Head of the Class *Alumni return to USD Engineering as instructors*



Alum adjuncts Mark Heffernan (top) and Soren Solari



Engineering alumni Mark Heffernan and Soren Solari returned to USD in 2007-08 not as students, but as instructors. This was a first for USD Engineering whose young alumni base is only in recent years seeing its first PhDs.

Mark Heffernan (EE 2001) returned as an instructor for Industrial & Systems Engineering teaching a course in systems engineering. Just seven years after completing his undergraduate degree, Mark is a Program Manager in Research and Development at Northrop Grumman who has a masters degree in information systems from SDSU and completed further graduate work in systems engineering from Caltech. Mark revised the course so that it reflected the multidisciplinary approach to systems engineering practiced in the

defense industry. This perspective is especially relevant since so many recent ISyE graduates have been employed as systems engineers by Raytheon and other companies. To add variety to the course, Mark also invited fellow EE alum Rasheed Behrooznia as a guest lecturer.

Soren Solari (EE 2000) was the second alumnus to return to USD Engineering as an instructor. When a circuits course needed a sudden replacement instructor in the Spring, Soren graciously agreed to step in. His new faculty colleagues and his students were really impressed by his work and, as a result, Soren has been invited to teach a senior elective related to his research area on the design and implementation of intelligent systems. Soren expects to complete his PhD in Engineering Sciences at UCSD this Fall.

Checking in with Edward Kaen ('00)

Keating Hotel owner puts electrical engineering degree to work every day

Running a business has its share of tough tasks, but Edward Kaen's motivation to succeed can be traced to what he learned at the University of San Diego.

"I will never forget my final project (the firefighter robot)," says Kaen, who earned a B.A./B.S. in Electrical Engineering in 2000. "I remember how frustrating and difficult the project was but, at the end of the day, how great it felt to accomplish. I am reminded of this project every time I'm faced with a really challenging situation."

Kaen's challenges do not include robots anymore. He is the founder and chief executive officer of the Keating Hotel Group. The company owns and operates the Keating Hotel, a four-floor, 35-room boutique hotel in San Diego's Gaslamp Quarter (432 F Street).

What sets the hotel apart is its Italian connection. Pininfarina, based in Turin, Italy, put its stamp on the 1890 building's design and look. The company, best known for designing and manufacturing automobiles, has expanded. The hotel was Pininfarina's first foray into hotel design and Kaen's flirtation six years ago with a Ferrari — exclusively designed by Pininfarina — fueled the eventual partnership.

"I was inspired by Pininfarina's amazing craftsmanship and innovative thinking and instantly, I felt Pininfarina would be a great collaboration for the chic hotel property I was planning," he says. "Pininfarina had been approached on numerous occasions in the past and always refused other hotel projects. The intimacy and historical significance of our hotel really grabbed their attention. In designing the Keating Hotel, Pininfarina focused on juxtaposing modern Italian design with classic historic details. Inside the Keating Hotel, one can find original wood and brick walls amongst aluminum rails, vibrant colors, cutting-edge design and state-of-the-art technology."

The hotel, which opened last year, has earned critical acclaim. It was named the project winner of the inaugural Earth-Minded Awards, which recognize exceptional sustainable design. In March 2008, Kaen won the Boutique Hotel Owner of the Year award at the Las Vegas HotelWorld Global Hospitality & Design awards competition.

"Owning the Keating Hotel has given me the opportunity to meet people from all facets of life and from all over the world," Kaen says. "I love being involved with a project that is positive for the community and something that people really enjoy."

The hotel's success has Kaen and his company looking into expansion to Chicago, Miami, New York, Los Angeles and San Francisco, as well as internationally. Kaen hasn't forgotten San Diego and, in particular, USD. The hotel has hosted the law school before and Kaen would like to host receptions, reunions and other USD-related events. It's his way of giving back to a university — and an engineering program — that gave him so much.

"Engineering definitely helps you analyze situations from every possible angle," he says. "In that way, it has been a great tool for my critical thinking and problem-solving skills, which are tools that can be applied to all aspects of life, especially within the hospitality business world where a new situation arises and must be dealt with every day."

— By Ryan T. Blystone



Edward Kaen

"I remember how frustrating and difficult the project was but, at the end of the day, how great it felt to accomplish. I am reminded of this project every time I'm faced with a really challenging situation."



Keating Hotel in San Diego Gaslamp Quarter

Accreditation — Continued from page 1

support, and other important areas. Accreditation was officially decided at the July 2008 annual meeting of ABET commission members.

ABET accreditation demonstrates a program's commitment to providing its students with a quality education. In addition to providing colleges and universities a structured mechanism to assess, evaluate, and improve their programs, accreditation also helps students and their parents choose quality college programs, enables employers and graduate schools to recruit graduates they

know are well-prepared, and is used by registration, licensure, and certification boards to screen applicants.



Remembering Dr. Thomas A. Kanneman

In November 2007, the university community was saddened to learn of the death of Dr. Thomas A. Kanneman, Professor Emeritus of Electrical Engineering and founding Director of Engineering at USD. Professor Kanneman passed away on November 11 from complications related to a recent heart surgery. Prof. Kanneman retired from fulltime faculty service at USD in 2006 after a long career of teaching, scholarship, and service. He was awarded the status of Professor Emeritus in May 2006 and was recognized with a University Professorship in 2005. As the first Director of Engineering and first member of the engineering faculty, he has had the longest and most sustained impact on USD's engineering programs of anyone on the faculty. He arrived at USD more than twenty years ago, having been hired away from Arizona State University where he was Professor and Chair of the Department of Electronics and Computer Technology. Prof. Kanneman was a consistent developer and advocate for strengthening USD's engi-

neering programs both to the benefit of students and the professional engineering communities throughout the region. He has been a very visible force in the community by having served as the president or chair of various professional associations, where he has sustained a visibility for USD and the quality of its engineering graduates.

Dr. Thomas Kanneman, Emeritus Professor of Electrical Engineering, was honored as part of National Engineering Week. In honor and remembrance of Dr. Thomas Kanneman's dedicated service to the engineering profession over more than 4 decades, the San Diego County Engineering Council (SDCEC) permanently changed the name of their Outstanding Service Award to the *Dr. Thomas Avolt Kanneman Outstanding Service Award*. SDCEC selected Dr. Kanneman to receive this award for National Engineering Week 2008 out of a field of numerous candidates. "It was wonderful to see Professor Kanneman's many years of professional service and leadership



Thomas A. Kanneman,
Emeritus Professor of
Electrical Engineering

recognized during San Diego's National Engineering Week," said Kathleen Kramer, Director of Engineering. "National Engineers Week was particularly meaningful to Professor Kanneman who was an active member with more organizations than any other fac-

ulty member I have ever met. He had made his professional service to National Engineers Week his highest professional priority for more than 10 years and it is extremely fitting that his work was so recognized."

Honors & Awards

Dr. Frank Jacobtiz, Associate Professor of Mechanical Engineering, was named **Outstanding Engineering Educator** at the San Diego County Awards Banquet held at USD in late February that recognized the contributions of local engineers. Jacobtiz was recognized for his outstanding contributions to engineering education and research. Dr. Jacobtiz was the first-full time faculty member in mechanical engineering when he came to USD in 2003.



Dr. Frank Jacobtiz



University of San Diego Chapter President **Annie O'Brien**, Lauren Gyllenborg, **Dr. Alana Cordy-Collins**, **Dr. Susan Lord**, and Jennifer Harding at the University of San Diego Mortar Board Faculty Appreciation Dinner.

Dr. Rick Olson received the Institute of Industrial Engineers (IIE) **Western Region award for Outstanding Faculty Advisor**. This award was made to recognize his dedicated efforts to the student chapter that have exemplified IIE's commitment to education, personal, professional, and technical development of students in industrial engineering related fields. He received the award on March 8, 2008 at the annual IIE meeting held in San Luis Obispo, CA.

Mortar Board is a national honor society that recognizes college seniors for excellence in the areas of scholarship, leadership and service. Mortar Board members represent the top scholars and leaders on their campuses. The Alcalá chapter of Mortar Board at USD surprised two of their faculty advisors, **Dr. Alana Cordy-Collins**, Professor of Anthropology, and **Dr. Susan Lord**, Professor of Electrical Engineering, at the annual Faculty Appreciation Dinner by tapping them for honorary membership. Other engineering faculty members, **Drs. Jacobtiz, McGarry, Morse, and Olson** were also honored by individual USD mortar board members for having made a significant contribution to their academic achievement and personal growth.

An Introductory Electric Motors and Generators Experiment for a Sophomore-Level Circuits Course," a paper authored by **Dr. Thomas F. Schubert, Jr., Ph.D., P.E.**, Professor of Electrical Engineering, won the 2008 Best Paper Award in the Division of Experimentation and Laboratory Oriented Studies (DELOS), at the 2008 American Society for Engineering Education (ASEE) Annual Conference. The paper was co-authored with Dr. Frank Jacobtiz, Associate Professor of Mechanical Engineering, and Dr. Ernest M. Kim, P.E., Associate Professor of Electrical Engineering, There were over 3200 attendees at the conference.



Dr. Thomas F. Schubert at ASEE being presented a plaque for 2008 **DELOS** best paper award by **DELOS** Chair **Brian G. Lefebvre**.

New Advisory Board Members

The Engineering Advisory Board (EAB) serves to help the Engineering Programs form plans and implement strategies for growth that serve the mission of the university and the San Diego technical community. The newest member of the EAB is **Dr. Anton Monk, VP of Communications Technology and co-founder of Entropic Communications.**

Members of the Electrical Engineering Advisory Board (EEAB), Industrial & Systems Engineering Advisory Board (ISEAB), and Mechanical Engineering Advisory Board (MEAB) help the programs to better serve their students by providing industry input and support on a variety of issues. The newest members of these boards include San Diego industry and program alumni who are active engineers in their fields providing leadership within their profession.

The new EEAB members include five alumni: **Rash-eed Behrooznia** who's currently an electrical engineer with **Lockheed Martin**, **Marko Kalemkeris** and **Jerad Petersen** who are both electrical engineers at **General Atomics**, **Dalia Tawy** who is an engineer at **Solar Turbines**, and **Adrianna Zammit** who is a sales engineer with **Harvey King**. The nine new ISEAB members include **Gayle Sandhu**, Direc-

tor of Performance Improvement & Accreditation at **Scripps Mercy Hospital** in Chula Vista, **Steven Howell**, Senior Director of Quality Assurance at **Avail Medical** in San Diego, alumnus **Jared Smith**, Senior Systems Engineer at **Raytheon** in San Diego, alumna **Jaclyn Sonico**, Continuous Improvement Manager at **Calloway Golf** in Carlsbad, **Amy Kosifas**, Program Manager for the **San Diego Unified Port District**, **Todd Pawlicki**, Director of Medical Physics & Clinical Operations at the **University of California, San Diego** in La Jolla, **Rick Sunamoto**, Director of Manufacturing at **HME** in Poway, **Victor Rojo**, Quality Manager at **Rain Bird** in Tijuana, Mexico, and **Michael Welch**, Project Manager at **SYS Technologies** in San Diego. The two new MEAB members are alumnus **Matthew Pettrucci**, a mechanical engineer at **Zimmer Dental** and **Mohammad Akhavan** who is a manager of research and development at **Hewlett Packard**.

Profiles of some of new advisory board members can be viewed at www.sandiego.edu/engineering.

General Atomics' Team Members

Chrissy Aneshansley,
Chris Lefon, Emley Brooks

Industry Sponsored Senior Projects



General Atomics — Testing Aircraft with the SCM Test Board (EE)

The team designed an automated test board module to test a Secondary Control Module for aircraft that meets detailed circuitry and interface specifications, runs a test simultaneously on two Units-Under-Test (UUTs), and fits properly into the Test Module. The team's test board allows General Atomics (GA) to save time as well as produce more accurate readings for its aircraft tests. The test module provides GA with a completely automated test board for the first time, replacing the manual procedure being used for testing of this system. (Advisors: Drs. Kramer/Pateros)

ViaSat Race Across America Broadcasting System (EE)



ViaSat Team Members Katrina Hearn, Christine Olmstead, and Heather Gardinier

The ViaSat Race Across America (RAAM) Broadcasting System enables the Race Across America Team's broadcasting crew to provide continuous coverage of the race while showcasing the unique capabilities of ViaSat's mobile satellite communication system. The USD EE team worked with ViaSat to deliver a result that will thrill fans and demonstrate advanced communication capabilities. A successful trial run was executed on April 5, 2008 and the ViaSat RAAM Broadcasting System will be fully integrated in the June 2008 race. The result is a complete, user-friendly system serving the race team and the fans.

The system provides:

- **Constant connectivity:** Communication System improvements provide a wider range of connectivity for increased network stability.
Increased quality:
- **Upgraded Camera System** provides a high performance motion camera mounted inside vehicle for enhanced viewing quality.
- **Custom Audio System:** Introduces broadcasting crew's audio commentary to the internet site for enhanced fan enjoyment.
- **Complete storage and stream:** All video and audio footage will be archived and published on improved internet site.

Advisors: Drs. Kramer/Pateros

SeaBotix R.O.V. Automated Tester (ME & EE)



Seabotix Team Members Blake Howes, Keith Kotecki Jr., Alex Perez, Paul Howie, Reggie Taylor, Amanda Sonen

SeaBotix is a company that produces remote operated underwater vehicles (ROVs). They had no automated testing platforms to reveal faults in their ROVs. This device allows SeaBotix to expose infantile errors due to thermal shock. With this, SeaBotix will be able to identify the faulty vehicles before delivered to their customer, saving them time and money that would have been spent in repair. The automated tester is intended to

- Expose the ROVs to thermal shock by subjecting them to water temperatures ranging from 0°C to 50°C
- Measure the thrust in all directions from each ROV thruster
- Automatically run the test and record the results over a time period of 8 hours.

Advisors: Drs. McGarry/Akhavin /Malicky

Award Winning Student Video



The Institute of Industrial Engineers (IIE), the world's leading organization of industrial engineers, awarded USD student entry first place in its Student Chapter YouTube video contest. Omar Damluji and Mike Hoxter received the award at the IIE Annual Conference in Vancouver. In addition to those students, Yasser Abdulfattah, Matt Irwin, Sulaiman (Sully) Abanumay were also significant contributors. The video, "Becoming An Industrial Engineer" presents the tongue-in-cheek "inspirational" story of Omar's journey to becoming an engineer. The soundtrack and editing help tell the story. It can be viewed at <http://www.youtube.com/watch?v=mB5mTKsqvMs>.

Shot from the video showing Omar's journey to becoming an engineer

Engineering Grant Awards -continued from page 1

Space and Defense Systems Award for Research on Speech Recognition

Brad Chase, Associate Professor of Industrial & Systems Engineering received a sub-award of \$55,000 from Space and Defense Systems, Inc (SDSI). The funding is from Defense Advanced Research Projects Agency (DARPA), for the project "From Explicit to Implicit Speech Recognition." A goal of the project is to improve the human-machine interface, where speech recognition is a critical factor. Recognition is hampered by noisy environments, homophones and speaker variations. The project aims to improve techniques in implicit and explicit speech recognition by using electro-encephalography (EEG) for the detection of neural signals and advanced techniques in the processing and analysis of those signals.

NSF Award to Improve Manufacturing Systems at USD

Claribel Bonilla, Assistant Professor of Industrial & Systems Engineering, was awarded \$74,825 by the National Science Foundation Course, Curriculum and Lab Improvement (CCLI) Program. The goal of this CCLI is to re-develop the manufacturing systems course/lab content within the Industrial and Systems Engineering curriculum. The course will be divided in relevant topics as identified by research, industry feedback and academic experts' advice. The project will also develop an integrated laboratory experience in conjunction with the course. The goal of the course and laboratory is to enhance student learning and improve the quality of undergraduate education at USD by adapting the feedback from industry and academic experts to the content of the new modified course. Learning



Improved Lab for Manufacturing Systems

modules will integrate student motivational value styles as identified through the Strength Deployment Inventory (SDI) assessment tool.

NSF Engineering Scholarship Award for Transfer Students

Claribel Bonilla, Assistant Professor of Industrial & Systems Engineering, has also received a National Science Foundation S-STEM award of \$413,848 for a five year project, "Bridging the gap between local community colleges and engineering at USD." Co PI's on the project are **Mathew McGarry**, Assistant Professor of Mechanical Engineering, **Susan Lord**, Professor of Electrical Engineering, and **Ming Huang**, Associate Professor of Mechanical Engineering. The project will provide \$10,000 per year for 12 community college transfers to the USD Department of Engineering. S-STEM's objective is to increase the opportunity for local community college transfer students who are talented but have financial limitations to earn a baccalaureate degree in engineering at USD. These students will be provided with a level of academic, financial, and personal support necessary to allow them to earn their B.S. degrees in three years in an academic environment committed to their needs contingent upon their maintaining academic eligibility. The program will target low-income, underrepresented ethnic minority and women engineering students. Successful implementation of this program will increase the percentage of students who are women and minorities at USD.

NIST Fellowship Award

Director of Engineering Kathleen Kramer has announced receipt of the NIST Fellowship for Emmett Perl, sophomore engineering major at USD. The award of \$7,815 was made by the National Institute of Standards Technology (NIST) for a Summer Undergraduate Research Fellowship. Emmett conducted research at the NIST facilities in Gaithersburg, Maryland. NIST offers the fellowships to undergraduates in order to be exposed to "basic research in areas that include the world's most technically advanced and fundamentally sound basis for electrical measurements."

NSF Award for Collaborative Project on Lifelong Learning

Susan Lord, Professor of Electrical Engineering, was awarded \$78,800 by the National Science Foundation's Innovations in Engineering Education, Curriculum, and Infrastructure (IEECI) program. This is a three year collaborative project with researchers at Bucknell University, Olin University, and Rowan University. "Role of faculty in supporting lifelong learning: An investigation of self-directed learning environments in engineering undergraduate classrooms" examines how faculty choices in the classroom influence students' lifelong learning skills. Lifelong learning is a critical skill for engineering graduates. While the literature on self-directed learning offers insight into how to develop lifelong learning skills, engineering educators have focused more on assessing lifelong learning than on understanding how instructors can foster such skills. The project team from engineering and education at four different institutions, is well positioned to investigate a variety of learning environments making results useful to the wider engineering education community.

NSF Award for Collaborative Project on Engineering Mathematics Education

Susan Lord, Professor of Electrical Engineering, and **Rick Olson**, Associate Professor of Industrial & Systems Engineering, have been awarded \$99,995 from the National Science Foundation's Course, Curriculum, and Laboratory Improvement (CCLI) program to support a Phase III project coordinated by Wright State University (WSU) entitled "A National Model for Engineering Mathematics Education." This project is a joint effort among 16 universities with the goal of improving engineering retention by helping students overcome math difficulties in early engineering courses.

Helping the San Diego Food Bank With A Senior Project



Brigitte Wesselink, Matt Irwin, Omar Damluji, and Yasser AbdulFattah

In Spring 2008, a team of 4 Industrial & Systems Engineers (Brigitte Wesselink, Matt Irwin, Omar Damluji, and Yasser AbdulFattah) completed a senior project for the San Diego Food Bank under the supervision of Prof. Rick Olson. Their project addressed the processes used by volunteers to inspect and sort the loose donations so they can be warehoused prior to distribution. The San Diego Food Bank distributes more than 10 million pounds of food annually to alleviate hunger throughout the county. Every year volunteers spend 52,000 hours a year collecting, cleaning, sorting, bagging, boxing and distributing the food. The project successfully accomplished a range of objectives intended to reduce the number of errors made during the process while improving the productivity of the volunteers.

The accomplishments of the project included:

- Creation of improved training materials
- Application of 5-S principles to improve the layout of the salvage and sorting rooms
- Installation of new signs throughout the process



Expand Your Horizons

The 6th Annual Expanding Your Horizons San Diego (EYH) conference took place at USD on April 12, 2008. The primary goal is to increase the participation, retention, and advancement of girls and women in mathematics, science, engineering and technology. The event held at the University of San Diego is organized by Sue Lowery, Professor of Biology, who is also Vice President of the San Diego EYH Board. Several USD faculty participate by leading workshop sessions, including Claribel Bonilla, Assistant Professor of Industrial & Systems Engineering, and Susan Lord, Professor of Electrical Engineering. USD Engineering students that helped work with the girls to make the day a big success included Anastasia Bronner, Sam Levine, and Catherine Massmann. Girls that participate in EYH are assigned to small groups led by two college mentors and get to experience hands on workshops.



Expand Your Horizons 2008

BeWISE

Susan Lord, Professor of Electrical Engineering, and Claribel Bonilla, Assistant Professor of Industrial & Systems Engineering, led a daylong BeWise workshop. BeWise stands for: Better Education for Women in Science & Engineering. This program for the San Diego Science Alliance makes a difference for talented young women who are encouraged to contribute to science and engineering professions.

In their “Exploring Engineering” workshop, students got to explore electrical engineering and the many items that people use everyday that are made by electrical engineers including cell phones, CD players, and computers. Participants explored electrical engineering through hands-on activities including experimenting with a fiber optic link such as those used in telephone systems and discovering the similarities and differences among different devices that emit light. In the second part of the workshop students got to explore engineering and manufacturing by exploring laser cutting technology. Laser cutting is a technology that is commonly used in industrial manufacturing. Participants got to explore the use of the laser cutter and designed their own initials in AutoCAD, the program used to direct the laser cutter machine.



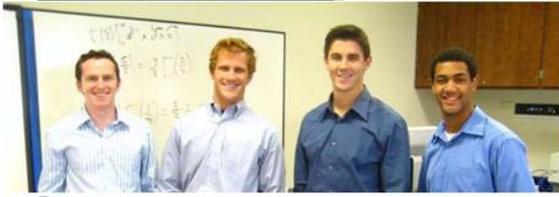
Dr. Lord with BeWISE participants

On April, 1, 2008 USD Profs. Claribel Bonilla, and Susan Lord were able to lead similar workshops to explore engineering as part of the **American Indian Recruitment (AIR) Program**. The AIR Program was established to support the ideals of promoting higher education to boys and girls from the native American community in grades 9-12. USD Society of Women Engineers student members Anastacia Bonner, Sam Levine, and Vicky Vargas helped facilitate the opportunity for the younger students to explore different disciplines of engineering.

Botball

The University of San Diego hosted the Southern California Botball Tournament on Saturday, March 15. It was the fourth time that USD has hosted this major San Diego robotics event that was held in USD's Sports Center. At the tournament, 28 student teams from grades 7-12 from all over Southern California participated, bringing their robots they have worked on for seven weeks. Their robots are autonomous and performed their tasks without using a remote control. Rick Olson, Associate Professor of Industrial & Systems Engineering, was lead organizer of the USD Engineering volunteers. Contributors included Tom Schubert, Professor of Electrical Engineering, who served as a Table Judge, and a large team of USD Engineering students representing the engineering student organizations. Botball is an educational program organized by the Norman, Oklahoma-based KISS Institute for Practical Robotics that emphasizes learning basic principles of engineering and programming through direct experience in building and programming working robots. KISS is a National Partner in Education of the NASA Robotics Education Project. USD's Institute of College Initiatives and the USD Engineering Programs are co-sponsors of the event.

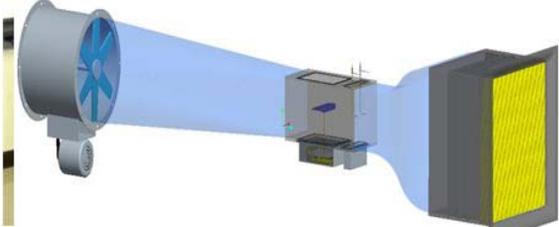
Latest Senior Projects



Wind Tunnel (ME & EE)

The project team designed and constructed a laboratory-grade wall-mounted wind tunnel for use in the University of San Diego's Department of Mechanical Engineering. The wind tunnel will serve as an additional experiment for the thermal sciences laboratory in order to alleviate congestion in the mechanical engineering labs. It will provide an accurate means of both visualizing and testing the dynamics of fluid flow over an object. The wind tunnel is designed to be durable, highly accurate, and user friendly. It is now installed in one of the laboratories.

Advisors: Drs. Jacobitz/McGarry/Akhavin/Malicky



Wind Tunnel Team:
Chris Wilson, Sean Leake, Chris Niethardt, Bruce Brown

RFID Pod—A Flexible RDIF Platform (EE)

The RFID Pod is a customizable, open ended, RFID Platform. The RFID Pod has the potential to be used as the foundation for a wide variety of applications. The price (under \$250) and the customizability of this system make it ideal for individuals and small businesses.

The RFID Pod has the following features:

- External Antenna.
- User friendly interface for customization.
- Stand Alone Operation
- External devices may be triggered by one of several outputs.

Advisors: Drs. Kramer/Pateros

RFID Team: James Backert, Chris Gianelli, Karl Riesen, David Riess



CORE Team: Shawn Lyons, Michael Nieman, Andrew Gerry

Command Relay (EE)

The Command Relay (CORE) allows you to control your home through text messaging. Stuck in traffic and going to miss your favorite television program? The CORE provides the convenience of controlling household devices when no one is home. The project team designed a device that controls a Digital Video Recorder (DVR) or other infrared-controlled device through Short Message Service (SMS) text messages. The device provides this functionality by integrating GSM modem with a microprocessor and infrared transmitter. Some of the functional specifications of the CORE include:

- GSM Modem Capable of Receiving Text Messages
- Infrared Transmitter to Transmit Control Signals to Devices
- Microprocessor to Control the CORE

Advisors: Dr. Kramer/Pateros

Eye in the Sky Surveillance Blimp (ME)

This group designed and built a remote-controlled blimp to take aerial surveillance videos. The blimp was designed to meet the following requirements:

- Fly a specified flight course by wireless remote control.
- Withstand 12 MPH crosswinds
- Record clear live video from a specified altitude for possible emergency situations.

Advisors: McGarry/Akhavin/Malicky



Blimp Team: Carlos Correa, Stephen McGee, Nate Allera

Hurricane Storm Window (ME)



Window Team: Alex Zammit, Scott Cuzner, Rusty Holzhauser, Ben Hunter

The project team designed an accordion style hurricane protection window system to be installed on homes to protect windows from high velocity impacts.

- The protection window will be made of stainless steel which will provide a long lifetime for the system.
- The window will be stored in a sidewall storage casing within the confines of the wall. The protection window will be driven into place to cover the window on demand by a manual driven winch pulley system
- This window protection system will save homeowners money by preventing objects from hitting windows and breaking the frame.

Advisors: McGarry/Akhavin/Malicky

Six Winch Implementation for Theatrical Camera Hoisting (ME)

The student project team (Bryce Knudson and Jason Balagtas) designed a hoisting system based on the Stewart Platform. This new system is more maneuverable and has a larger workspace than that of the current Stewart platform. The engineering team adapted the NIST Robocrane system to move a camera for dynamic filming purposes. The project is a scale model of the concept which solves the shortcomings of the previous Stewart platform and similar systems.

This system allows for the creation of intricate motion paths of any object. The model can easily be implemented on a larger scale for real world applications. The theatrical applications range from dynamic filming to moving and orienting large props or even mimicking realistic flight for prop airplanes and superheroes.

Advisors: Huang/McGarry/Akhavin/Malicky



A piece of the new Stewart Platform

Extended Flight Plane (ME)

Plane team:
Arnel De
Guzman, Jason
Gasmin, Elijah
Crow



The project team designed a solar powered radio controlled (RC) plane to meet the following requirements:

- Utilize solar power
- Light weight and inexpensive
- 20 min of flight time

This project was designed to improve the current flight time of today's RC planes by energy from the sun as a power source to run a small onboard motor.

Advisors: McGarry/Akhavin/Malicky

Class of 2008



The USD Engineering Class of 2008 included 26 students, including its biggest ever class of Mechanical Engineers, Here's what they are doing now:

- **Eduardo Barboza (ISYE)** is an Industrial Engineer for **Delimex–Heinz N. America**.
- **Alfredo Bermudez (EE)** was commissioned as a Second Lieutenant in the **US Marine Corp**. He will be going to Quantico, VA to attend The Basic School (TBS).
- **Carl Bruce Brown (EE)** is a Project Engineer/ Sales Engineer for **Johnson Controls, Inc.** in San Francisco, CA.
- **Andrew Burke (ME)** is a Tooling and Process Engineer at **Veridiam Advanced EDM** in Poway, CA.
- **Scott Cuzner (ME)** is in Global Operations Leadership at **Johnson & Johnson** in Skinman, NJ.
- **Omar Damluji (ISYE)** is a Systems Engineer at **BAE Systems** in Rancho Bernardo, CA.
- **Evan Ewald (ME)** is a Mechanical Engineer for General Atomics Aeronautical Systems in San Diego, CA.
- **Jason Gasmin (ME)** is in the Eaton Leadership Development Program for **Eaton Corporation** in Moon Township, PA.
- **Ian Hardey (ME)** is doing graduate study towards an MSEE at the **University of Washington** and has been commissioned as an Ensign in the **US Navy**.
- **Katrina Hearn (EE)** is a Project Engineer/Sales Engineer at **Johnson Controls** in San Francisco, CA.
- **Blake Howes (ME)** is a Mechanical Engineer at **Innovative Engineering Systems**, Bakersfield, CA.
- **Paul Howie (ME)** is a Mechanical Design Engineer for **Solar Turbines** in San Diego, CA.
- **Adrian (Shawn) Lyons (EE)** was commissioned as a Second Lieutenant in the **US Marine Corp**. He was first sent to participate in an intensive language program in Tajikistan and then he will be going to Quantico, VA to attend The Basic School (TBS).
- **George McColgan III (EE)** has been commissioned as an Ensign in the **US Navy** and will be attending Nuclear Power School in Florida.
- **Christopher Neithardt (ME)** is doing graduate study towards an MSEE at the **University of California, Los Angeles**.

- **Christine Olmstead (EE)** is an Electrical Engineer at **SAIC** in La Jolla, CA.
- **Adam Purdy (ISYE)** is a Loss Prevention Consultant for **Golden Eagle Insurance** in San Diego, CA.
- **Guy Robertson (ME)** is a Mechanical Engineer for **Remote Ocean Systems** in San Diego, CA.
- **Amanda Sonen (ME)** is a Supplier-Technical Engineer at **Solar Turbines** in San Diego, CA.
- **Greg Tolchinsky (EE)** has begun study towards a law degree.
- **Ronald Tran (ISYE)** is a Fabrications Planning Engineer at **Steico Industries** in Oceanside, CA.
- **Brigitte Wesselink (ISYE)** will be an Industrial Engineer for **Walt Disney World** in Orlando, FL this fall and is awaiting her March 2009 **Peace Corps** assignment.

Welcome Lei Zheng

Lei Zheng is the newest member to our Engineering technician staff. Ms. Lei Zheng (pronounced Lay) comes to us from Massachusetts where she worked as a Test Engineer for a solid state lighting and manufacturing company. Lei graduated with a Master's degree, major in Electrical Engineering from the University of Massachusetts Lowell in 2007 and previously

obtained an MS/BA in Mechanical Engineering from China. Lei enjoys working in an educational environment. She and her husband have a "very cute two-year-old daughter, Yao" and they live in Mira Mesa. Lei enjoys reading, cooking and gardening and is particularly fond of San Diego's wonderful weather. We are excited to have her with us.



Lei Zheng

Faculty News



Introducing **Matt** and **Vilma McGarry**

Dr. Matt McGarry gets married

On December 30, 2007, Matt McGarry, Associate Professor of Mechanical Engineering, married Vilma Velazquez at the La Jolla Women's Club.

Dr. Leonard Perry becomes a Daddy

Baby Jack is born - Jack Nicholas Perry was born on May 5, 2008 at 1:58 am weighing 6 lbs 8 ounces and 20 inches long. He is healthy and gorgeous with a lot of dark hair.



Baby Jack Nicholas Perry

Alumni News

Class of 1992

After 10 years of flying for the U.S. Navy, **Glenn Hickok (EE)** got pulled into corporate America - working for EMC (data storage and management) for about 5 years and currently working as a Vice President with Crossmatch, a leading provider of biometrics (face, finger and iris capture and recognition) technology for the past couple of years. He lives in the Washington, DC area.

Class of 1993

Mauricio Lopez-Hodoyan (EE) is Senior Director of Marketing for Qualcomm's chipset division. He and his wife have a beautiful daughter, Valeria Lopez-Hodoyan.

Class of 1994



Valeria Lopez-Hodoyan, age 14 months.

Lisa Smith Corcoran (EE) is working at Qbase as a Data Analytics Engineer, and her husband Jim was just sworn in as a Police Officer and has already made his first arrest. They have a daughter, Lexi, who is 9 years old and a son, Justin, who is 7.



Lexi & Justin Corcoran

Andrew Isaksen (EE) earned two international MBAs, one from USD and the other from TEC de Monterrey, in

Monterrey, Mexico. While studying in Monterrey, he met his wife, Arlene. They live in San Clemente, California. He does consulting for small companies on business operations and business plans, and he is working on a couple of his own projects.

Dominic Pimentel (EE) and wife Arlene welcomed their third child, Luke Kenneth Pimentel. Dom is working at Synopsys Corporation, spending most of his days at Qualcomm. He still tries to surf and play soccer as much as possible.

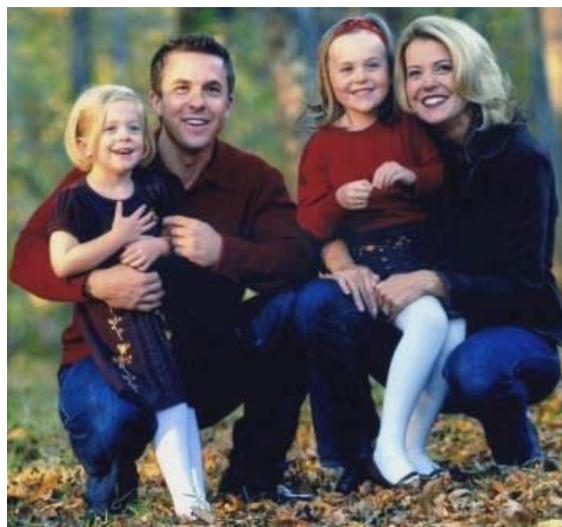


Dom Pimentel and his sons

Class of 1996

Lanford Wasada (EE) is a Manager in Firmware Engineering at Broadcom in San Diego. His group works on wireless connectivity, focusing on Bluetooth.

Class of 1997



Christine Bridewell Keefe (EE) with husband, Greg, and daughters Emily and Alese

Maureen Feiner Colucci (EE) and her husband Paul had their third baby boy on September 12th, 2007, Alexander Xavier. Brothers John Paul (4) and Max (3) are happy to have another wrestling partner in the family.



Maureen Feiner Colucci with husband Paul and sons John Paul, Max, and Alexander.

LCDR Tom Mack (EE) earned his MSEE and is now working at SPAWAR in Charleston, SC as a Project Manager and Systems Engineer.

Class of 1998

Vu Lac (EE) is the Field Applications Engineer for New England for Laird Technologies. Laird Technologies is the world leader in the design and manufacture of antennas and EMI (electromagnetic interference) solutions.

Class of 1999

Schaffer Grimm (EE) is enrolled at UCLA and working towards an MBA.

Zaldy Valenzuela (EE) was recently selected for promotion to Lieutenant Commander and has orders to be the Communications Systems Officer aboard the USS Blue Ridge (LCC 19). He is finishing up his tour at Ship Repair Facility - Japan Regional Maintenance Center. He helped plan and execute the USS Kitty Hawk's (CV 63) final maintenance availability and has been preparing for the arrival of the USS George Washington (CVN 73). On April 25, 2008, the Valenzuela family welcomed Jacob Nicholas into the family.



Zachary Valenzuela (age 4) and his baby brother, Jacob

Class of 2000

Daniel Empeno (EE) continues to work as Consultant for Spawar in San Diego.

Dylan & Katie Empeno enjoying Halloween

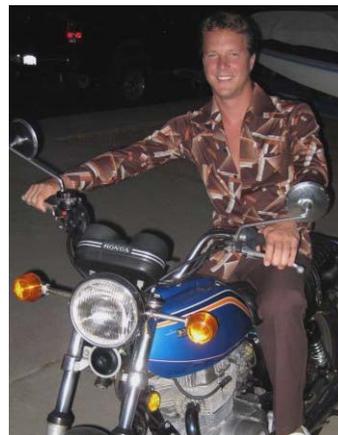


Emiliano and Siriana at 15 months

Emiliano Gallegos (ISyE) is the general manager for one of the three Mexico-based companies (Triagosa, Argo Chemical Trading Company, plus one more trading company) that he owns together with his brother and sister. He is on the board of Cetys Universidad, a well known university in the northern part of Mexico that is aiming to become the first WASC-accredited university in Mexico. Emiliano lives in San Diego with wife Naomi and a 15 month old daughter named Siriana.

Michael Hawkins (EE) is a Sr. Account Executive at Motorola and is currently currently living in Hawaii, but getting ready to move to Munich, Germany. He will be handling Motorola's military accounts in the Middle East and Africa.

Ryan Ingram (EE) has been with Luxtera in Carlsbad, CA for the last four years. Luxtera developed a Silicon Photonics technology platform for single chip transceivers. He recently purchased a motorcycle to help with his 4 mile work commute



Ryan Ingram (EE) dressed for a disco party

Grant Markewitz (ISyE) earned an MBA from the University of Toronto and recently started a new position in Toronto as a Management Consultant for Satov Consultants. He is one of four Industrial Engineers on staff at Satov.

Chris Miller (EE) is a Research and Development Engi-

Alumni News (cont'd)...

neering Architect at Hewlett Packard in Roseville, CA. He has spent most of his career in firmware development and test for enterprise storage arrays. His current position primarily involves leading the engineering teams through projects.

Soren Solari (EE) married Ruthi Bozman-Moss in Big Sky, Montana on August 31. Soren also expects to finish his PhD at UCSD this fall.



Soren Solari and Ruthi Bozman-Moss

Ricardo Valerdi, PhD (EE) was recently elected to the Board of Directors of the International Council on Systems Engineering (INCOSE). He is also the founding co-Editor-In-Chief of a new academic publication, the Journal of Enterprise Transformation that will be jointly published by INCOSE and the Institute of Industrial Engineers (IIE). Ricardo is a Research Associate in the Lean Aerospace Initiative and a Lecturer in the Engineering Systems Division at MIT. He and his wife



Briana are enjoying the Boston area. Their baby son, Rocco, recently turned 1.

Ricardo Valerdi with wife Briana and son Rocco

Alika Vasper (EE) and **Michella Reyes (EE)** reconnected a couple years ago and well, the rest is pretty much history. The long distance got old and expensive fast so Michella has left SAIC and is now a test engineer for BAE Systems in downtown Honolulu. She reports, "It is so amazing out here, I really like it." Alika has been a nuclear engineer for Pearl Harbor Naval Ship Yard (PHNSY) for over 5 years.



Alika and Michella

Class of 2001

Amanda Bishop (EE) just graduated with an MBA from Stanford University and has a baby son, Luke.



Amanda Bishop with new baby Luke

James Cena (EE) is currently at Penn State, but his tour there is coming to a close in December. He and his family are heading back west to Breerton, Wa. He was selected for transfer into the

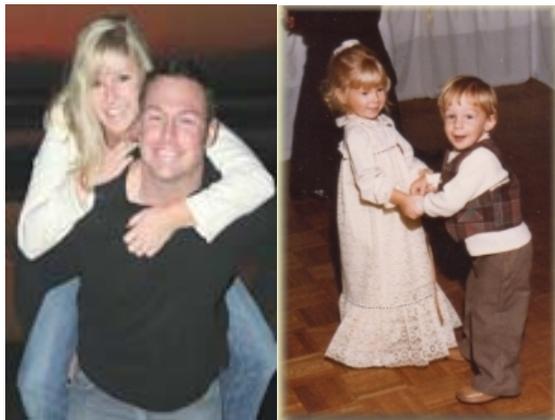
James Cena
with his wife,
Melanie, and
their two
daughters.



Engineering Duty Officer community and his job now is going to be shipyard repair of both nuclear and non-nuclear ships. James also just completed his MS in Engineering Management from Old Dominion University.

Carlos Dominguez (EE) is a Technical Artist at High Moon Studios and he is an Instructor at Art Institute of California in San Diego.

Mark Heffernan (EE) accepted a promotion to R&D Program Manager for Northrop Grumman Electronic Systems in Rolling Meadows, a northwest suburb of Chicago, IL. His program is LITENING, a targeting pod system integrated and mounted externally to aircraft. He and his fiancée, Jennifer Ann Boston, met at a family wedding when he was two, met again for another family wedding 27 years later, and are going to be married at the Immaculata this November.



Mark and fiancée Jennifer — now and then

Alex Rojas (ISyE) is currently a Lead Program Quality Engineer for Raytheon Co., Space and Airborne Systems in El Segundo, CA. He is married to Hilda Echeverria (USD BBA Accounting) who works for Ernst and Young, and they live in West Hollywood.



Alex Rojas
and his wife
Hilda

Class of 2002

Travis Amrine (EE) is an engineer at Lighthouse Technologies, Inc. primarily doing B2B sales of interconnect/RF for OEM, CM, and some universities. His current responsibilities include developing a connector for Altera's development board. The Aruba Networks nodes that are used throughout USD's campus use his company's RP SMA connector in their access points.

Oscar Arzu (EE) and wife Lauren welcomed a baby girl, Nyla, to their family.

Lisa Duvall (EE) is a Sr. Account Manager with Maxim Integrated Products in the mixed-signal and analog semiconductor industry calling on accounts like Motorola, HP, Sony & Kodak.

Ian Nauhas, PhD, (EE) successfully defended his doctoral thesis in Biomedical Engineering at UCLA in April 2008. His thesis is entitled Functional Connectivity in Primary Visual Cortex. He began a post-doc position at the Salk Institute in La Jolla, CA, in July and is working on a very novel technique called multi-photon microscopy. *[Editors note: Ian is now our second alumnus to earn a PhD in Engineering.]*

Estrellina Pacis (EE) was married to Robert Rius in Oahu, HI on February 16, 2008. Fellow engineering alum Jaclyn Sonico (ISyE) participated in their wedding ceremony. Estrellina continues to manage robotics R&D projects for SPAWAR Systems Center, San Diego. She recently obtained an office at NASA Ames in Moffett Field, where she is also pursuing robotics technology transfer between SSC San Diego and Ames and is supporting analog lunar experiments with Ames' K10 rovers.

Alumni News (cont'd)...



**Estrellina Pacis
with new husband
Robert**

Jaelyn Sonico (ISyE) is married to LT Joseph Hebreo M.D. who is currently stationed at the Naval Hospital, Camp Lejeune, NC on September 5. She has no plans on relocating to NC since she has just accepted a promotion to become the Continuous Improvement Manager in Product Design & Development at Callaway Golf.

Class of 2003

Matthew Craig (ISyE) and his wife, Jessica, are living in China. Matt reports, "It is a little different but we are both enjoying it."

Joseph Herrera (ISyE) is currently working for B.Braun Medical in Irvine CA. He is a BPS (Lean) Specialist (Applied Lean Manufacturing & 6-sigma).



Joseph Hererra

LT Jeff Lavery (EE) is at the Naval Postgraduate School in Monterey, CA and is expected to complete his Master of Science in Electrical Engineering this fall. Says Jeff, "I can honestly say that the skills I learned at USD not only prepared me for an EE masters program but it gave me a leg up on my peers from other schools. From the simplest tasks of using an oscilloscope and performing circuit analysis to the more daunting tasks compiling lab results and of writing my thesis, USD engineering provided me with a solid foundation to apply my skills. Please let all the professors at USD Engineering know that their work is much appreciated and respected" In the US Navy, Jeff has been stationed in San Diego serving various tours from Gunnery Officer on the USS Shiloh to an Admirals Aide on the USS Nimitz. Jeff and his wife Maureen Ann Lavery (USD Law 02') welcomed baby son Peter last fall and have a beautiful two year old, Rory.



Jeff Lavery with wife Maureen, daughter Rory and baby son Peter.

Dylan Mora (EE) is an Electrical Engineer at Remote Ocean Systems in San Diego. The company designs and manufactures reliable, high-tech equipment and systems for the most severe oceanographic, industrial, commercial, and military environments

Wesley-Dupree Morgan (EE) moved from Raytheon to International Rectifier (IR) in Santa Clara, CA. At IR, he is a Product Engineer involved in hybrid and PCB-level DC/DC converters for Aerospace and Defense.

Miguel Sosa (ISyE) is about halfway through Leaders for Manufacturing program at MIT. This is a joint program with MIT's School of Engineering and MIT's Sloan School of Management that leads to both an MBA and MS in Mechanical Engineering from MIT. He expects to graduate in June 2009.

Jonathon Velte-Smith (ISyE) works for Northrop Grumman in El Segundo CA as a Quality Engineer. He performs source inspection at supplier manufacturing facilities of military aircraft parts.

Patrick Weed (ISyE) is currently a Lieutenant in the Navy on assignment in San Diego as a Nuclear and Civil Engineer Officer Recruiter. He has served several terms as an officer on several submarine duties. He is enjoying his time on land in San Diego.

Class of 2004

Melody Ablola (ISyE) has said bye-bye to the Big Apple... and hello to Eurostar trains to Paris and Amsterdam! She is still working as a logistics consultant, but has relocated from New York City to the London office of Arup. She designs logistics solutions for projects such as the London 2012 Olympics, Dubai Opera House, and Masdar eco-city in Abu Dhabi. She plans to get a PE license in IE next year.

Nick Barker (ISyE) is about halfway through Leaders for Manufacturing program at MIT. He has recently joined Amazon, Inc. in Seattle for a 6 month internship that is part of this joint program with MIT's School of Engineering and MIT's Sloan School of Management. He expects to earn both an MBA and MS in Mechanical Engineering from MIT in June 2009.

Seamus Keith (ISyE) is currently working with Nypro, Inc in Chula Vista, CA as a Lean Six Sigma Manager. He recently passed the ASQ Six Sigma Certification. Seamus and Kristy were married in August 2007.

Aaron Milam (EE) has left JPL for a position as a senior engineer at Northrop Grumman in Los Angeles. He's also declared a second Masters Degree at LMU, so he plans to complete one in Mechanical Engineering and another in Systems Engineering in the Spring of 2009. At Northrop Grum-

man, he's working on Electrical Requirements, Definitions, Verification, and Test in the Systems Engineering Division. He also obtained a real estate broker's license a couple years back and has brokered his own purchases on several multi-family properties. In his free time, which is small, he is still volunteering as an assistant coach on the boys baseball team at St. Francis High School, in La Cañada. He also runs a free Wednesday night catchers clinic each Fall for local kids ages 8-14.

Jared Smith (ISyE) completed his MS in Systems Architecture & Engineering (within the ISYE department) at the University of Southern California in December 2008 as part of a fellowship program with Raytheon.



Jared Smith and a friend at his graduation from USC

Class of 2005

John Crawford (ISyE) currently works at Raytheon Space and Airborne Systems in El Segundo, CA as a Quality Assurance Engineer II. He provides quality support through design, procurement, manufacturing, assembly, test and delivery of high-reliability spaceflight hardware.

Julie Dang (EE) is a sales and marketing development manager at Intel Corporation.

Tom Davis (EE) spent a full year traveling through Central and South America, Australia and New Zealand, Southeast Asia and Japan (a total of 18 countries.) He became an advanced-level scuba diver in Thailand, went skydiving in New Zealand, saw ancient ruins in Cambodia, Guatemala and Peru, toured North Vietnam on a motorbike, sang

Alumni News (cont'd)...

karaoke in Japan, and hiked in extreme weather in Patagonia. He also learned to speak Spanish.

Erin Fullinwider (EE) has become licensed as a Professional Engineer (PE).

[Editors note: While many take and pass the Engineers-in-Training exam, very few electrical engineers ever take the PE exam. Congratulations to Erin!]

Doulan Reis (ISyE) works for Lockheed Martin Space Systems Company in Sunnyvale, CA as a Quality Engineer. He collaborates with engineering and manufacturing functions to ensure quality standards are in place.

Yoshitaka (Bob) Yano (EE) is pursuing a Master of Science in Electrical Engineering at Loyola Marymount University.

Class of 2006

Sarah Barrera (ISyE) recently moved to North Carolina where she began working for CISCO

Systems as an Associate System Engineer. She is training as a Field Engineer in order to provide technical support to new customers lacking expertise in network hardware.

Ryan Gallagher (ISyE) works for SPAWAR (DoD - Navy) as a Cost Engineer/Analyst. His duties include to provide program life-cycle cost estimates used for budgets and decision-making for EVM analysis. SPAWAR is responsible for C4I systems (command, control, communications, computers, intelligence) aka heavily software based electronic systems that go on ships, subs, airplanes costing billions of dollars.

Erika Lopez (ISyE) continues working in Spain as a Project Officer for IBM Business Solutions where she manages and controls project resources, financial and economical reports, contact clients and suppliers, and manage project reports (weekly and monthly).

Holly Lyons (ISyE) works at Goodrich Aerostructures in Chula Vista, CA as a Material Acquisition Administrator. She locates and works with suppliers in



**A Travelling
Tom Davis**

Low Cost Countries (LCCs) to source long term statements of work for Boeing, Airbus, and Regional Jet components and assemblies for suppliers in China, Malaysia, India, Mexico, Thailand, Taiwan, and Korea.

Lori Rasmussen (ISyE) is back in Minnesota working as a Marketing Engineer for the Emerson Process Management Division of Rosemount Measurement. She is responsible for training new sales reps on the product line and identifying new applications for products. She is excited about the new opportunity and states “the company is great and the people are incredibly friendly and understanding”.

Leah Ribble (ISyE) is employed by Boeing in Seattle, WA. She is a Manufacturing Industrial Engineer Level 2 for their airline division. She enjoys the summers in Seattle in her new convertible.

Class of 2007

Ali Almatrouk (EE) has started work with Zain Group as a Core Network Engineer. Zain (formerly MTC) is the pioneer of mobile telecommunications in the Middle East and now a major player on the African continent.

Cher Engebrecht (ME) is pursuing a Master of Science in Mechanical Engineering at the University of Washington.

Benjamin Fieman (ISyE) is a Project Manager at Loco Boutique in Honolulu, HI. 2008 summer internship was at FOX Sports in Los Angeles, CA. He received a scholarship to attend Pepperdine’s Graziadio School of Business for MBA program with an expected graduation date of April 2009

Stephanie Hay (ISyE) is working at a small company called Interface Displays and Controls in Oceanside, CA. Her position is a Technical Sales Engineer and she is basically the liaison between the engineers and the customers travelling about 50% of the time. She is involved in development and design of new products as the company specializes in customization. She is diving into head first into researching electronics in order to support their products as well as to understand the needs of their customer.

Mark Kondrat (ISyE) has just moved back to Pensacola, FL to fly helicopters for the Navy. Previously, he was stationed in Corpus Christi, TX

where he flew the T-34C. He is working on getting back to San Diego to fly out of North Island by October.

Jonathan Martinez (ISyE) has decided to study medicine and is currently living in Orange County taking preliminary courses at Long Beach State.

Ian Metzger (ME) is pursuing a Master of Science in Mechanical Engineering at the University of Washington.

John Nisson (ISyE) is employed by Callaway Golf as an Associate Engineer in the Manufacturing Leadership at Scripps Poway, CA. He is currently in the manufacturing engineering rotation and mostly doing project management work. He also states, “I’m getting down and dirty in the machine shop every once in awhile.”

Joe Quiroz (ISyE) works for Northrop Grumman Corporation as a Systems Engineer in Rancho Bernardo, CA. He works in the Ground Segment (shelters) for the Global Hawk program.

Jeremy Salter (EE) has joined the Lockheed Martin Engineering Leadership Development Program. It is a three year rotational program geared towards high achievers inside the company. For Jeremy, the idea of a rotation over onto the business development or financial side is very exciting. The program requires him to earn a Masters degree and Lockheed Martin has agreed to support his participation in the Management Science and Engineering program at Stanford University.

Birsin Sivar (ISyE) moved to Berkeley, CA, to take a job with Bayer HealthCare pharmaceuticals as a Systems Analyst. Says Birsin, “I guess you can tell I can not stay away from Bio-Tech. Working at Gen-probe after graduation has given me a perfect opportunity to learn about the Bio-Tech Industry. After working there for 6 months I got offered this job by Bayer who we have collaborated for some of our projects and it is a great opportunity.” In the future, Birsin hopes to go to graduate school at UC Berkeley.

Susan Williams (ME) is a Mechanical Engineer at McCrometer in Hemet, CA. McCrometer is a global leader in flow meter products that are used in various industries: chemical, electric power, facilities, food, HVAC, irrigation, oil/gas, water and waste water.

Engineering Insights is an annual publication of the USD Department of Engineering. The Editor thanks the numerous faculty, staff, alumni, and students who contributed to this issue, particularly Mrs. Lorena Silvas, Prof. Susan Lord, and Prof. Rick Olson. Special thanks to Ryan Blystone for his expert assistance.

News or updates? Write to usdengr@sandiego.edu or www.sandiego.edu/engineering/alumni



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