University of San Diego

Engineering Insights

Newsletter for the USD Department of Engineering

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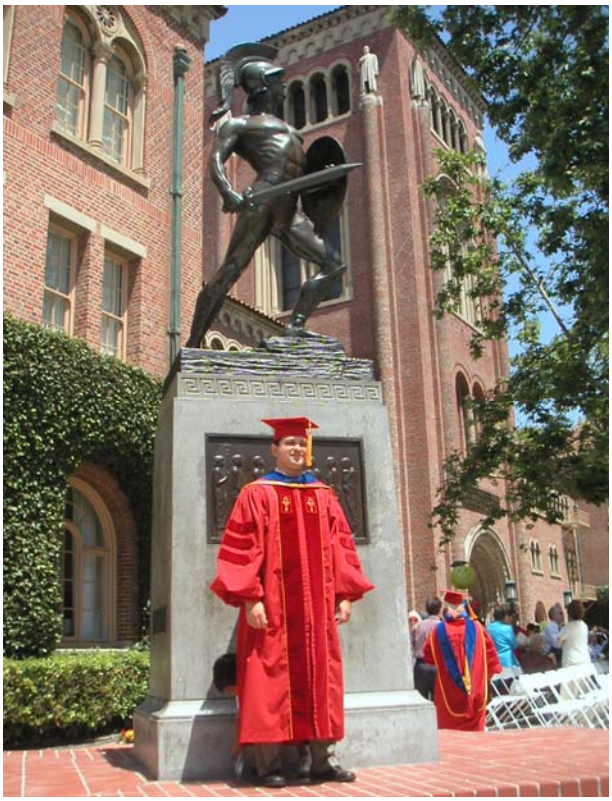
USD Engineering Alums Choosing PhDs in Engineering

On May 13, **Ricardo Valerdi** (EE '00), along with his family and friends, celebrated his graduation with a PhD in Industrial & Systems Engineering from the University of Southern California. His dissertation was entitled, "The Constructive Systems Engineering Cost Model." Many students who graduate with their undergraduate degree in engineering from USD go on to graduate studies. Frequently these alumni go on to get masters degrees in engineering, MBAs, law school, or other fields. Dr. Valerdi, however, is the first alum of USD Engineering to earn a PhD in Engineering.

This summer, he begins his new position in the Department of Aeronautics & Astronautics at the Massachusetts Institute of Technology (MIT) within the Lean Aerospace Initiative. Ricardo's dissertation involved the development of a parametric cost model for systems engineering. The majority of the data used to calibrate the model was obtained from aerospace companies including BAE Systems, Raytheon, Lockheed Martin, and Northrop Grumman. During the course of his graduate studies, Ricardo was also a researcher at the Center for Software Engineering at USC and at the Economic and Market Analysis Center at the Aerospace Corporation (a Federally Funded R&D Center). Before pursuing the PhD, he earned an MS from the System Architecting and



Dr. Ricardo Valerdi celebrating his PhD from USC

Calendar of Engineering Events

Interested members of the public and alumni are warmly invited to attend these upcoming events this Fall:

Thursday, October 27	Fall Engineering Convocation – join current students and alumni for lunch and an interesting speaker
Thursday, December 8	Fall Open House – See latest projects completed for senior design

Engineering program, also from USC. Prior to that, Ricardo was a System Engineer at Motorola in the Public Safety Communications group.

Dr. Ricardo won't be alone in this lofty 'Dr.' status for too long. At least three of his fellow alumni are close at heels working on their own PhDs in Engineering:

Soren Solari (EE '00) is currently a PhD candidate in the Mechanical and Aerospace department at the University of California, San Diego (UCSD) in the area of intelligence systems and control. He is working in the study of control systems, optimization and control of deployable structures. Last year, Soren was awarded the "Outstanding Teaching Assistant Award." Much of his research is directed towards space programs. Prior to graduate school, he was a Senior Test Engineer at Tality Corporation (formerly Cadence).

After getting his Masters in Electrical Engineering (Signal Processing emphasis) at UCLA, **Ian Nauhaus** (EE '02), decided to apply his work to the area of computational neuroscience, an interdisciplinary field that combines math, physics, electrical engineering, and other fields to study the signals in the brain. Ian is now a Neuroengineering PhD student in Biomedical Engineering at UCLA doing research in the Visual Neurophysiology Lab. Visual neuroscience, he reports, is very mathematical. As a systems identification problem, the mathematics is very similar to that studied in electrical engineering. Ian studies the transmission of signals within the primary visual cortex using both optical imaging (light wavelength reflectance from hemoglobin) and voltage recordings from a micro array of electrodes. Correlations are established between the visual stimuli and what we read out and these relationships help researchers to infer how the brain works.

Andrew Putnam (EE '03) is quite unique in that he graduated from USD with a triple major: Electrical Engineering, Computer Science, and Physics. Andrew is now getting his Ph.D. in Engineering and Computer Science at the University of Washington in Seattle, WA. He is there with support from Raytheon Corporation in San Diego, and is currently doing his Ph.D. qualification research in computer architecture. His primary work is on the WaveScalar project, a dataflow micro-architecture that is a radically different style of microprocessor architecture than the current Pentium-style von Neumann architectures. He is responsible for designing the detailed micro-architecture and develops RTL-level models using them to do timing, area, and power analysis on different configurations. He plans to return to Raytheon after graduation.

Andrew Putnam is now a PhD Student at the University of Washington

The Latest Senior Projects

There are several senior project teams this year (6 in Electrical Engineering and 3 in Industrial & Systems Engineering) doing capstone projects in a wide variety of areas. We are grateful for the involvement and support of several local companies including ViaSat, Trex Enterprises, and Kyocera. Here is the sampling of some current and recent projects:

Voice Interface Box (EE)

The Voice Interface Box (VIB) is a **ViaSat**-sponsored senior design project that works as a communication control unit used to interface multiple radios on two frequencies or channels. The VIB gives more structure to a system of radios on two channels by allowing for better control and efficient communication. The box gives the user the option of selective communication with both channels, speaking to both channels simultaneously if the information is to be shared with everyone, or individually if the information is only to be given to one.

Seniors Lovelyn Mangat, Brandon Miller, Michelle Esteban of the Voice Interface Box team

Platform Motion Measurement System (EE)

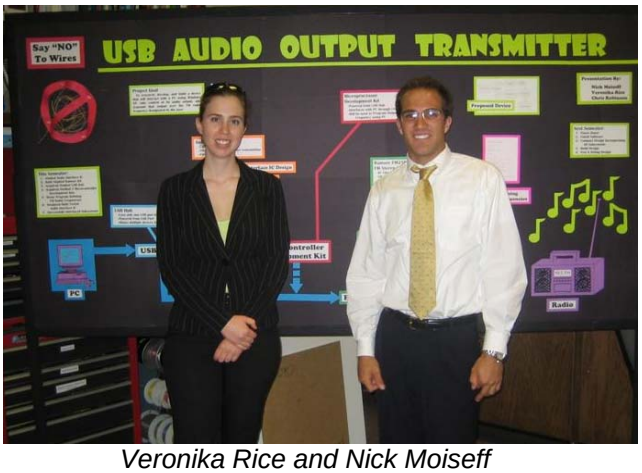
Platform Motion Measurement System interface is a system of vibrations experienced by the disturbances on any moving platform cause mounted systems to be unstable and unreliable. The vibrations can vary from very low to very high frequencies. It is important to measure the amplitude and frequency of vibrations to maximize the efficiency of mounted systems. Using high frequency sensors, such as Magneto-Hydro-Dynamic (MHD) sensors, integrated with low frequencies sensors, such as Micro-Electro-Mechanical- System (MEMS) sensors, a large range of vibrations can be measured.

The goal of this project is to design and implement a filter that will allow two sensors to act as one single sensor that can detect both low and high frequency vibrations from about 0.01 Hz to 1000 Hz. Combining these two sensors will produce an efficient and accurate measuring tool that will allow users to stabilize systems over a large range of conditions.

Seniors Yano Yoshitaka and Zlatko Filipovic presenting their platform motion project

USB Audio Output Transmitter (EE)

USB Audio Output Transmitter is a project by Veronika Rice, Nick Moiseff, and Chris Robinson to research, develop, and build a device that will interact with a PC using Windows XP, take control of its audio output, and transmit that output over an FM radio frequency. Audio technology has grown tremendously over the last five years. USB audio output transmitter is a simple solution to allow playing of audio files without wiring. It will transmit the audio signal over a desired, programmable FM radio frequency, thus allowing a receiver to pick up and play the audio file over stereo speakers.



Veronika Rice and Nick Moiseff

ViaSat Employee Weight Tracker (EE)

The goal of this project is to provide an easy and simple method for the work force to keep track of their weight and health over time. A common digital scale will be used to measure a person's weight. Their weight will be recorded and saved onto a website for future viewing. An identification card will be swiped prior to the weigh in to identify the user with his or her weight. As of today, the barcode scanner and scale are in working specifications with the PIC18f6720 microcontroller used in the design. Also a passive website has been constructed to simulate how the user will log on to the server and track their weight. An active site using active server pages will be ultimately designed.

Brett Chicotka, Joshua Martin, Baxter Box

WiMAX Transceiver LTCC Module (EE)

WiMAX Transceiver LTCC Module, sponsored by Kyocera America Inc., is the speed and range limitations of the popular WiFi technology have led to a new demand for newer technology to further expand the wireless market, namely WiMAX. The goal of this project is to develop a wireless module to be used for WiMAX applications. High-end computer design and analysis tools were used to build basic structures of a module and analyze them in terms of high frequency microwave theory. A module, based on these tools and research, is to be designed for WiMAX transmissions.

Nathan Roberts, Paula Lucchini, Marcos Vargas

Wireless Audio Visual Entertainment System (EE)

The current method of connecting cable television throughout a house is extremely cumbersome and may not have the television connections where they best meet the needs of a family. A solution is to have an RF wireless transmitter/receiver for the transmission of a television signal from a cable box receiver to a television set. Available systems lack the simple functionality of changing channels at the television. A wireless transmitter/receiver to broadcast an audio/visual signal with the ability to change channels from the same area as the television set being viewed was designed. With the creation of this wireless system, we eliminated the need to run unnecessary cables while still providing the user with the same functionality.

WAVES Team - Paul Sexton, Douglas Sangillo, Christine Nishiyama, Rob Raney

USD Engineering Class of 2005

Class of 2005

The USD Engineering class of 2005 has set a record in size as the largest yet. The graduating class of 2005 includes students getting their degrees in January 2005 (finishing their coursework in Fall 2004), May 2005, or August 2005. Nineteen earned a BS/BA in Electrical Engineering (including five summer graduates) and six earned a BS/BA in Industrial & Systems Engineering. The first class of Mechanical Engineers is still in the pipeline and we will have the first seniors in that major this fall. Here's what some of our recent graduates are up to:

- **Ashur Benjamin** (ISyE) is an Industrial Engineer for Raytheon in Goleta, CA. He works for the Space and Airborne Systems division based on remote sensing

- **Joseph Church** (EE) is an engineer with AETC Incorporated in La Jolla. At AETC, Joey is with a group doing research in air acoustics. He's been doing a good mix of both analog and digital design with a lot of signal processing. (He reports that he's a pro with LabView now.) AETC specializes in advanced remote sensing techniques for the U.S. Department of Defense and has projects developing a wide variety of sensing, detection, and decision-support systems. While he was accepted into graduate programs in EE at UC Santa Barbara and Cal Poly, his job keeps him in San Diego for now, so he's pursuing a masters in EE at SDSU.

- **Thomas Congdon** (EE) is a hardware engineer at SAIC's Monitoring Systems Division in San Diego. He works on the design of low-powered sensor modules for monitoring borders and national defense. He reports that the work has been very similar to his senior project except with a much bigger budget! Tom passed the EIT exam in April.

- **John Crawford** (ISyE) is a Systems Engineer for Raytheon in El Segundo, CA.

- **Julie Dang** (EE) is a Technical Sales Engineer for Intel Corporation in Santa Clara, CA. She is in Intel's Sales and Marketing Rotation Program, which allows her to rotate through different product divisions, and while at each group, advocate and sell various Intel products and strategies to customers.

- **Matthew Dominick** (EE) is an Ensign in the US Navy and is presently assigned to Naval Aviation Schools Command at NAS Pensacola.

- **Michelle Esteban** (EE) will be a Production Engineer at Aera Energy. Based in Bakersfield (Michelle's hometown), Aera Energy is one of California's largest oil and gas producers, accounting for approximately 30% of the state's production, and is jointly owned by Shell and Exxon Mobile.

- **Zlatko Filipovic** (EE) will be an Electrical Engineer at Genomics Institute of the Novartis Research Foundation (GNF) in San Diego. The company does research to integrate state of the art technologies, making possible new approaches to complex biomedical problems in the neurosciences, immunology and cancer biology

- **Erin Fullinwider** (EE) is an Engineer for Syska Hennessy Group, Inc. in Los Angeles, CA. Erin is doing Engineering Consulting for engineering, technology and construction firm that is a leader in sustainable design. The company recently received awards for The Maria Fareri Children's Hospital at Westchester Medical Center in New York.

- **Kimberly Kawahara** (EE) is a Jr. Customer Planner for Maui Electric Company. She is very pleased at having a position that allows her to return home to Hawaii.

- **Robert Knuff** (ISyE) Is an IT Technical Support for University of San Diego.

- **William Leslie** (EE) is a Project Engineer at Lusardi Construction Company. Lusardi is a full service general contractor responsible for a wide variety of projects including San Diego's Dura Pharmaceuticals Corporate Headquarters.

- **Chad Loftis** (ISyE) is a 2nd Lieutenant in the United States Marine Corps.

- **Erik Loftis** (EE) is a 2nd Lieutenant in the United States Marine Corps and a student in Fox Company at the Basic School in Quantico, VA.

- **Dustin Mendes** (EE) is a Jr Project Manager at RLS. Headquartered in San Francisco, RLS develops designs for data centers, voice/ data/video networks, audio/video systems, and media facilities. This company designed all of the acoustic systems for the Clear Channel radio studios in San Francisco and has worked on both the Microsoft campus and George Lucas's new film studio. Dusty reports that he's found his dream job.

- **Ebice Minjares** (EE) is a Systems Engineer for Cubic Defense Applications in San Diego. This company designs instrumented range systems for fighter aircraft, armored vehicle and infantry force-on-force live training. It also has communications products including jam-resistant data links, signal

intelligence receivers and Direction Finding (DF) systems for the military and signal intelligence markets.

- **Brian Momeyer** (EE) and **Thomas Davis** (EE) are Hardware Engineers for SoftMax Inc. SoftMax, Inc. develops advanced signal processing technology solutions that enable machines to function in real-life environments. Based in San Diego, the company has applied exploration of how the brain functions to develop SoftMax Signal Separation or S^3, which has in speech signal processing, biomedical data analysis, image and video analysis and compression, and large-scale data mining of information.

- **Doulan Reis** (ISyE) is a Systems Engineer for Lockhead Martin in San Francisco, CA.

- **Daniel Villalva** (ISyE) is a Material Integrator working for Northrop Grumman in San Diego, CA.

- **Yano (Bob) Yoshitaka** (EE) is applying to the graduate schools to pursue a graduate degree in Electrical Engineering. He has interests in DSP, control systems and robotics.

Notable Industry Involvement and Support

Chevron Support for SWE

This February, Pat Woertz, Executive Vice President for Chevron, met with members of USD Engineering's Society of Women Engineers (SWE) to present a check from Chevron in support of the SWE annual Evening with Industry. Dr. Susan Lord, SWE Faculty Advisor, Dr. Kathleen Kramer, Director of Engineering, along with student officers, Christine (Eri) Nishiyama and Paula Lucchini are pictured below at this happy meeting with Ms. Woertz. This year's Evening with Industry was incorporated into the Society of Women Engineers Sonora Region Conference held in San Diego and was sponsored by more than 25 companies.

Pat Woertz presents Chevron support for the Society of Women Engineers

Rudolph & Sletten provides engineering scholarships

Our thanks go to Rudolph & Sletten, a construction and engineering contractor firm, for providing scholarships in 2004-05 to five engineering students. Congratulations to selected recipients: Jeremy Salter (EE), Rose Smith (ISyE), Tyson Vogel (ME), Cheryn Engebrecht (soph), and Stuart Goble (frosh).

ViaSat Provides Senior Project Support

Many engineering students complete senior projects that are industry-sponsored. Companies sponsoring senior projects have included SAIC, Trex Enterprises, Kyocera America, and others. This year, senior project teams in electrical engineering received more than $10,000 in project support from ViaSat, Inc., of Carlsbad, CA. Dr. Chuck Pateros, USD EE Advisory Board Chair and a Member of Technical Staff at ViaSat, is warmly thanked for his efforts for these project teams.

Mechanical Engineering Advisory Board is formed

The Mechanical Engineering Program is pleased to announce the formation of the Mechanical Engineering Advisory Board (MEAB). This MEAB will assist the Mechanical Engineering program by providing input regarding overall program objectives, evaluation of senior elective topics, and support for and evaluation of students senior project activities. Its membership includes:

- Steven Albright (Zimmer Dental)

Steve Albright is the Director of Manufacturing for all Zimmer Dental products. He received his Bachelors degree from Cal Poly Pomona, in Mechanical Engineering, and a Masters degree in Engineering from UCLA. He has 30 years experience in aerospace and medical design and manufacturing, including the design and manufacture of precision instruments, optics, aerospace mechanisms, and precision implantable devices for medical applications. Current major initiatives include the development of lean manufacturing practices for the medical industry, working to improve the product development process within the medical manufacturing community, and the development of un-manned machining/ inspection processes for medical products with critical tolerances.

- Dave Padgett (Asymtek)

David Padgett is a Business Unit Manager for Asymtek (a Nordson Company), based in Carlsbad, CA. He currently manages the activities of another Nordson Company, H.F. Johnston, which supplies sheet metal, machined parts, and welded frame assemblies to Asymtek. He has served as Engineering Manager at Asymtek and other companies, and has received seven patents for mechanical and system designs completed as a Mechanical Engineer and Project Manager. He is a member of the American Society of Mechanical Engineers (ASME) and has served as Treasurer and Chair of the San Diego Section of the ASME. Mr. Padgett received his BSME from Cal Poly, San Luis Obispo, CA.

- Phillip Young (Solar Turbines)

Phillip Young is a Customer Service Engineer employed at Solar Turbines a division of Caterpillar Tractor Company. He has also been employed as a Program Engineer employed at Hamilton Sundstrand Power Systems, a division of United Technologies. He currently works on engineering development of cooling fans for commercial and military aircraft. He has been a member of California Registered Professional Mechanical Engineer American Society of Mechanical Engineers (ASME) for 30 years. Mr. Young received his Bachelor of Science in Mechanical Engineering from the University of California, Davis.

- Cecilia & Thomas Hardey

The Hardeys provide the ME advisory board with a parents' perspective on the program. Their son, Ian, is a student.

Honors and Awards …….

Dr. Thomas Kanneman, Professor of Electrical Engineering, was awarded a University Professorship for in recognition of "outstanding, balanced, career contributions supporting the mission and goals of the University." He will be presented with this award at the annual Presidents Convocation this fall.

Dr. Kathleen Kramer, has been promoted to Professor of Electrical Engineering. Dr. Bradley Chase has been promoted to Associate Professor of Industrial & Systems Engineering.

Dr. Susan Lord, Associate Professor of Electrical Engineering was recognized for her innovations in service learning

for engineering freshmen with the 2004 Innovations in Experiential Education Award. Also in 2004, she was presented with a "USD Woman of Impact" award after a nomination by SWE student president Christine Nishiyama.

Dr. Perla Meyers presenting Dr. Susan Lord with the Experiential Education Award

Award from IEEE for Student Project

Congratulations to Matt Dominick for winning the IEEE Southwestern Area technical competition for his team's senior project mapping cell phone signal strength. He goes on to competition for the western U.S. this fall and the technical paper has qualified for inclusion in the *Proceedings of the IEEE WESCON Conference*. Awardee Matt Dominick offers thanks to Dr. Mikaya Lumori, USD IEEE Faculty Counselor and Dr. Chuck Pateros for their help with his entry and the original student project.

Welcome Our Newest Faculty and Staff….

We are pleased to introduce two new Mechanical Engineering faculty members and one visiting faculty member for Industrial & Systems Engineering.

Dr. Ming Huang

Dr. Ming Huang, Associate Professor of Mechanical Engineering, is our third tenure-track Mechanical Engineering faculty member.

He received his Diploma in Mechanical Engineering from the University of Rhode Island, Kingston, Rhode Island in 1984, and his Doctor of Philosophy in Mechanical Engineering from Ohio State University in Columbus, Ohio in 1988.

Dr. Huang's teaching research focuses in areas of Mechanical design with emphasis on mechanism and machine design, robotics and manufacturing automation, computer-aided design and human-machine interface in interactive simulation.

Dr. Ming Huang, Assoc. Professor of Mechanical Engineering

Dr. David Malicky

Our fourth ME Faculty member is David Malicky, Ph.D., Assistant Professor of Mechanical Engineering. He earned his Ph.D. in Mechanical Engineering at the University of Michigan in 1998 with a dissertation that placed 1st in the ASME Bioengineering Division's Ph.D. Student Paper Competition. He taught mechanical engineering at Valparaiso University for more than two years and also has a M.S. in counseling and

educational psychology from the University of Kansas. Dr. Malicky's research interests are in orthopedic biomechanics, particularly for the human shoulder, and engineering education.

Dr. David Malicky, Assistant Professor of Mechanical Engineering

Dr. Jennifer Rogers

Dr. Jennifer Rogers, Visiting Assistant Professor of Industrial & Systems Engineering, studies economic replacement analysis as it affects capital assets that are subject to technological improvements. Dr. Rogers comes to USD having just completed her PhD in Industrial Engineering at Lehigh University. She has a BS degree in Mathematics from Penn State University. Consumers engage in single-asset replacement analysis every time they consider making or putting off a major purchase. Dr. Rogers uses dynamic programming to develop models that determine economic replacement schedules for assets undergoing improvements either gradually over discrete periods of time, or in quantum leaps because of technological breakthroughs. "Up until now," says Dr. Rogers, "most models have considered either the continuous or discontinuous improve-ment scenario. We're trying to combine the two models." A break-through in technology, she says, can result not only in higher purchase prices but also in lower operating and maintenance costs, pushing overall costs lower. Similarly, the expense of a new family car might be offset by lower repair bills and higher gas mileage.

Dr. Jennifer Rogers, Visiting Assistant Professor of Industrial & Systems Engineering

Meet Jocelyn Baluyut

Our new administrative assistant, Jocelyn Baluyut, has more than three years of administrative experience in a university setting. Jocelyn has just recently moved to San Diego and already enjoying the good warm weather that San Diego has always been known for. She has a Bachelor's Degree from San Jose State University.

Ms. Jocelyn Baluyut, our newest staff member

Pursuing an MBA is one of her life goals. She enjoys hanging out by the beach on a sunny day and would love to learn how to surf someday.

Faculty News...

Dr. Michael Morse (EE) is now the proud owner of a 60' Lien Hwa power boat. He purchased the vessel last year in Seattle and has spent much of his free time during the last year enjoying the boat in the beautiful waters of the Puget Sound and the Vancouver area. Although the task of moving the boat south was quite daunting, Dr. Morse was lucky enough to be joined by Dr. Mikaya Lumori (EE) and Illya Ninichuck (EE '00) as his first-rate crew. One stop included a visit to Port San Luis (pictured) where former ISyE faculty member, Dr. Jose Macedo, assisted the crew while the vessel was re-fueled. Over a period of 11 days Dr. Morse and crew steadily moved the vessel south, at points enjoying the coastal beauty and at other points being challenged by big seas and serious weather. Dr. Morse looks forward to sharing his new toy with students and other alumni.

Dr. Morse, Dr. Lumori, Illya Ninichuck, and Dr. Macedo refueling in Port San Luis.

Dr. Kathleen Kramer (EE), her husband Jorge Geremia, and two-year-old bother Duncan, welcomed a baby girl into their family this spring. Celeste Aurora Geremia was born on Friday, April 22 at 9:17 am. She weighed 8 lbs, 3 oz and was 20 inches tall.

Celeste Aurora Geremia

Congratulations to Dr. James Kohl along with wife, Jennifer and son Andrew, as they welcome an addition to their family. Mayling Harriette Kohl was born on Friday, May 20, 2005 at 9:18 am. She weighed 8lb 10oz and was 21 inches long.

Mayling Kohl

Alumni News

Class of 1994

Derek Kranig has been with Laserdyne Prima for about 8 years. The company designs and builds laser machining systems. He works with the control portion of the machine, CNC, servos, and laser integration. For an extra challenge, he and his brother run an automotive repair shop that has been keeping them pretty busy. It's a lot of fun and gives them time to hang out.

Fredrik Axsater is putting his MBA to use as an Investment Strategist at Barclays Global Investment Services. He is currently living in downtown San Francisco (Russian Hill). His work takes him all over the world. This year he have been traveling more to London, which has been interesting; most recently, he went to South Africa for three weeks, which he describes as fantastic.

Class of 1996

Kevin Wensley is a Senior Systems Engineer at Pentadyne Power Corporation in the Los Angeles area. The company designs and manufactures advanced flywheel energy storage systems. Designed to provide high power output and energy storage in a compact, self contained package, Pentadyne flywheels are a low maintenance, lightweight, and environmentally sound alternative to conventional batteries. The technology has been successfully applied to automobiles, electric rail, and power quality application. In 2003, Kevin married Andrea Geyer. They met because their parents are neighbors in Michigan. Kevin and Andrea live in Oak Park, CA.

Class of 1997

Christine Bridewell-Keefe along with big sister Alese and husband Gregory Keefe, welcomed a baby girl into their family. Emily Alexis, was born on June 28th 2004 weighing 8lbs, 1oz and was 20.5 inches tall.

Alese & Emily Keefe

Scott Denton and his wife, Dr. Clarissa Reese, welcomed the birth of a baby girl, Olivia Reese Denton, on July 15, 2005. At birth, she was 8 lbs 7oz, and 20.5 inches long. Scott and Clarissa Denton are doing well, and are trying to adjust to the lack of sleep.

Olivia Reese Denton resting on the bony knees of Scott Denton

Class of 1998

Bryan Espiritu is a Test Engineer for Cisco Systems. He and wife, Kathlea, live in the San Jose area.

Bryan & Kathlea Espiritu

Class of 1999

Jason Mendonsa married wife Jennifer at USD's Founders Chapel in May 2002. He is currently putting his electrical engineering degree to use at the family construction business in Vacaville, CA. Jason received his PE license in August 2004.

Mike Dunn works in Technical Support and Sales at Hewlett Packard in the San Jose area.

Schaffer Grimm has been an engineer with Northrop Grumman Corporation for more than four years. His work includes designing high frequency MMICs (microwave monolithic integrated circuits). In the commercial division at Northrop Grumman, Schaffer's work includes both design and sales. He completed MS in EE (Communications) at USC in 2002.

Forrest Stephens is a Member of Technical Staff at ViaSat, Inc. in Carlsbad. He works as a Hardware engineer, specializing in board design. His current project is a satellite simulator His wife, Sherry, is finishing a Masters in Education (Fall 2004) at USD. His oldest son is Dominic, 2 1/2 years old.

Forrest Stephens & son Dominic dropped by Loma Hall recently

Juan Elizarraras served in the US Navy as an officer on a submarine, the USS San Francisco SSN 711. He recently left the navy. He, wife Sonia Rios, and their daughter, Vanessa, are living in Pleasanton, CA.

Class of 2000

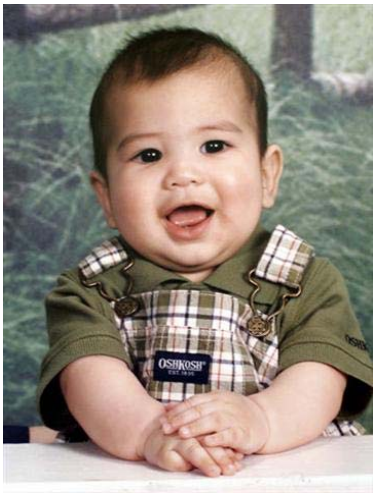
Ricardo Valerdi married high school sweetheart Brianna Broadfoot in July 2005. He and Brianna have moved to Boston, MA.

Ricardo Valerdi and Brianna Broadfoot married in July 2005 at Founders Chapel

Grant Markewitz has begun study in the MBA program at the University of Toronto.

Daniel Empeno is an engineering consultant at the Anteon Corp. He was recently promoted to Senior Engineer and led a team of 4 consulting at SPAWAR in San Diego. His team provides engineering support to the Tactical Data Links International Program Office. Being involved in an international program, he had the opportunity to travel to great locations such as Spain, Germany and France.

He and wife Jessica live in Scripps Ranch with their son, Dylan Gabriel, who was born on Thursday September 16, 2004 at 1:30 pm. He weighed 7lbs and was 19" long.



Dylan Gabriel Empeno

Class of 2001

Nathan Schneider is a pilot in the Navy and flies EA-6B Prowlers out of Whidbey Island Naval Air Station in Washington state. He is in VAQ-135 and left on his first WESTPAC cruise this spring aboard the USS NIMITZ. The mission is to provide airborne electronic attack support by jamming enemy radars. Nathan married his fiancée Miriah Proffitt, on New Year's Eve 2005.

Patrick Yrigoyen is the President of BY Proyectistas SAC. This is a real estate development company, which was started by Patrick and is located in Peru. He manages a multidisciplinary team of engineers, basically doing project management. Patrick got married a couple of years ago to a USD alumna and moved back to Peru. He has a 4-month old baby named Lucas.

Mike Hawkins is still working for Motorola, and now supports the US Military in Japan and Okinawa. This work requires him to travel to Japan every other month. He and his wife live in Hawaii.

James Cena when last heard from was on board USS John C Stennis (CVN 74) as the Reactor Auxiliaries Officer expecting to complete a five-month deployment. He is in charge of a twenty person division which takes cares of four diesel generators. His responsibilities include ensuring the performance of four diesels that are the last line of defense from the vessel going completely dark. His wife and 1-year-old daughter, Deanna, are doing well.

Carlos Dominguez works at USD in the IT Department as a CRM Technical Analyst. He married Nicole Boyle.

Carlos and Nicole Dominguez

Class of 2002

Pedro Usma works at SAIC in San Diego, CA. He was recently promoted to Engineering Designer. In other news, he continues to devote his time to the Karate school he founded. It has grown to more than 170 students.

Master Pedro Usma & students

John Kammerer and wife Miyuki are proud to announce the arrival of Casey Kenta Kammerer. He came into the world on February 9, 2005 at 21:12, weighing 7lbs 12.5oz and measuring 20.5" long.

Casey Kenta Kammerer

Class of 2003

Ryan T. Zierolf is an Electrical Engineer for The Boeing Company in Santa Maria, CA at the Vandenberg Air Force Base. He is currently working for the Ground-based Midcourse Defense (GMD) program. The purpose of the program is to develop and deploy a system that detects, tracks and destroys incoming missiles before they enter our atmosphere. His duties include, testing, troubleshooting, and integrating.

Scott Feyka is an Electrical Engineer for Remec in San Diego, CA. He is in the Defense & Space Group. REMEC develops and manufactures tele-communications infrastructure products for voice, video and data transfer over wireless networks and sophisticated microwave electronic subsystems for defense radar, communications and electronic warfare applications.

Robert J. Schaefer is a new employee at Nypro. Robert has become a certified Six-Sigma Green Belt & is back in San Diego, CA.

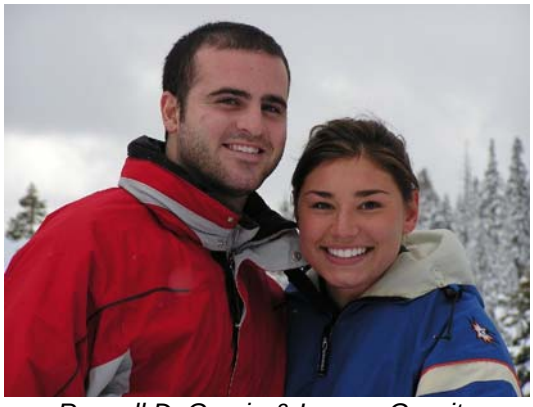
Joseph Herrera is an Industrial Engineer at Prime Wheel in Gardena, CA. His work has involved plant layout, standardization using time studies, creating SOPs and process training videos, statistical data analysis, production planning, project engineering, and various "lean manufacturing" initiatives.

Class of 2004

Katherine Reyes is a Systems Analyst for Tactical Engineering and Analysis, Inc. in San Diego. Her duties include frequent off-site work at a lab in Point Loma. She enjoys the hands-on aspects of her work there.

Seamus Keith is working as an engineer at Nypro.

Russell DeCaprio is working for Raytheon in San Diego, CA. He is proud to announce his engagement to Lauren Cassity. They got engaged over Memorial Day weekend.



Russell DeCaprio & Lauren Cassity

Kyle Thompson and Jonathan Velte-Smith both work as Manufacturing Engineers for Northrop Grumman Corporation. They work within the Supplier Quality & Technical Performance group (SQ&TP). Their work supports military aircraft that Northrop Grumman builds, including the B-2 Bomber, F/A-18 Hornet, and EA-6B Prowler. They provide manufacturing and quality support to suppliers and internally. Their jobs often keep them off-site at supplier assignments located in and around Los Angeles, so their travel is local. They are also team members on a project to improve supplier connectivity to Northrop Grumman and are working to implement an automated computer system for suppliers to submit status information.

News or Updates? E-mail usdengr@sandiego.edu, submit on web at http://www.sandiego.edu/engineering/alumni or call Lorena at 619-260-4627.

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