

California State University, Fresno

**College of Engineering**

*Annual Report*  
*2007-08*

June 2008

**Appendix C: FACULTY AND PROFESSIONAL STAFF ACTIVITY**

Information is presented in the following categories, alphabetically by Department or stand-alone Program

- Publications: Sole-authored and co-authored books, book chapters, refereed publications, reviews, proceedings, compositions, sound recordings, videos, on-line journals, other (includes plays, poetry, fiction, essays)
- Creative Activities: Invited, contracted, juried creative activities, other
- Presentations: Invited keynote, peer reviewed, other (includes adjudications, performance demonstrations, workshops)
- Honors
- Grants
- Volunteer Service Any unpaid activities that benefited a nonprofit, not-for-profit, government or religious organization. This may have included direct service, membership on an advisory board, providing research or logistical support for projects, or any other type of service. Please include the agency, # of hours, # of faculty/staff and # of students. (Please **do not** include service learning classes.)

• **Publications:**

**Civil and Geomatics Engineering (Dept)**

- Attard, T.L., and Mignolet, M. (2007). "Random Plastic Analysis using a Constitutive Model to Predict the Evolutionary Stress-Related Responses and Time Passages to Failure," *Journal of Engineering Mechanics*. In-Press.
- Attard, T.L., and Marusic, M. (2008). "Kinematic-Isotropic based Yield Surface Collection Model for Determining the Nonlinear Anisotropic Responses in Buildings: Part I Derivation," *Engineering Structures* (submitted for review).
- Attard, T.L., and Marusic, M. (2008). "Kinematic-Isotropic based Yield Surface Collection Model for Determining the Nonlinear Anisotropic Responses in Buildings: Part II Application," *Engineering Structures* (submitted for review).
- Attard, T.L., and Dansby, R.E. (2007). "Evolutionary Structural Control of Elastic and Inelastic Strains using Rehabilitative Algorithms in Damaged Steel Buildings," *Journal of Mechanics of Materials and Structures*. (submitted for review).
- Attard, T.L., and Dhiradhamvit, K. (2007). "Control of Buildings with Higher-Mode Effects Excited by Non-Stationary Ground Motions using Lead-Core Base Isolation (LCR) of Elastic and Inelastic Strains in Potentially Damaged Steel Buildings," *Journal of Mechanics of Materials and Structures*. (submitted for review).
- Attard, T.L., Pnevmatikos, N.G. and Gantes, C.J. (2008). "Integrated Control Strategy for Structures subjected to Dynamic Loading," *Proc., Tenth Pan-American Congress of Applied Mechanics – Volume 12, PACAM IX, Cancun, Mexico*.
- Attard, T.L. and Dhiradhamvit, K, Attard, (2008). "Lead-Core Base Isolation of Highly-Nonlinear Multi-Story Steel Buildings subjected to Near-Field Excitations," *Proc., Tenth Pan-American Congress of Applied Mechanics – Volume 12, PACAM IX, Cancun, Mexico*.
- Attard, T.L. and Dhiradhamvit, K., and (2008). "Damage Detection and Monitoring of Highway Panels poured with a Rapid-Set® Concrete," *Proc., Tenth Pan-American Congress of Applied Mechanics – Volume 12, PACAM IX, Cancun, Mexico*.
- Attard, T.L., and Dansby, R.E. (2008). "Evolutionary Control of Damaged Systems using a Rehabilitative Algorithm," *Proc., Tenth Pan-American Congress of Applied Mechanics – Volume 12, PACAM IX, Cancun, Mexico*.
- Attard, T.L and Wesson, M.D. (2008). "Preliminary Study: CFRP Applications for Already-Damaged Bridge-Column Bents using Experimental Shaking Table Tests," *Proc., Tenth Pan-American Congress of Applied Mechanics – Volume 12, PACAM IX, Cancun, Mexico*.
- Attard, T.L., Wesson, M.D., and Abela, CA. "Hydraulic-Powered Seismic Shaking Table: Testing CFRP-Based Energy Dissipation in Bridge Columns," *Fluid Power Journal*, **15(4)**.
- Attard, T. "Tenth Pan American Congress of Applied Mechanics," Editor, PACAM X, Volume 12, Cancun, Mexico, January 7-11, 2008.
- Choo, C & Issam Harik, "Structural Deck Evaluation of the John A. Roebling Suspension Bridge," *Historic Bridges – Evaluation, Preservation, and Management*, CRC Press, Taylor & Francis Group, April 2008, pp 101-124.
- Choo, C., Tong Zhao, & Issam Harik, "Flexural Retrofit of a Bridge Subjected to Overweight Trucks using CFRP Laminates," Elsevier, Science Direct, Composites: Part B, 38 (July – September 2007), pp 732-738.
- Larralde, J and Tiwana, S. and, "Use of FRP Panels as reinforced Segmental Retaining Walls," *Proceedings, 10<sup>th</sup> Pan American Congress of Applied Mechanics, Cancun Mexico, January 2008*.
- Ogaja, C. , Zhao S-H., X-S. Lu, Q-F. Wang, G-R. Hu and. "Analysis and evaluation of various tropospheric modelling approaches for high-precision GPS kinematic positioning over medium ranges and at high altitude: A case study," *JOURNAL OF SURVEYING ENGINEERING*, Submitted October 2007.

- Xiao, M., Reddi, L.N., Howard, J., Devine, A., Stott, R. (2008) "Erosion control on roadside embankment using compost soil". *Submitted to*
- Xiao, M., Reddi, L.N., and Steinberg, S. (2008). "Variation of soil water characteristics due to particle rearrangement". *Submitted to ASCE International Journal of Geomechanics*.
- Xiao, M. and Gomez, J. (2008) "Rainfall erosion resistance and stability of various compost". *Submitted to Journal of Soil and Water Conservation*.
- Xiao, M., Reddi, L.N. (2008) "Pore structure variation of porous media under vibration". Proceedings of the 4th decennial Geotechnical Earthquake Engineering and Soil Dynamics Conference. Session: Dynamic Properties. May 18-22, 2008. Sacramento, CA
- Xiao, M., Abela, C., Mortensen, K., Beltran, M., Oliver, A. (2008) "Rainfall erosion resistance of various compost soils on roadside embankment". ASCE Geotechnical Special Publication No. 178, Geosustainability and Geohazard Mitigation. Proceedings of GeoCongress 2008, Reddy et al. (Ed). ASCE Geo-Institute.
- Xiao, M. and Reddi, L.N. (2008) "Particle clogging in drainage layers". Proceedings of the Tenth Pan American Congress of Applied Mechanics (PACAM X), January 7th – 11th 2008, Cancun, Mexico.

### **Construction Management (Program)**

None

### **Electrical and Computer Engineering (Dept)**

- Albandakji, R, Safaai-Jazi, A. and Stolen R., "Fresnel Fiber", SPIE Newsroom
- Kinman, P, Berner, J.B., Bryant, S.H., "Range Measurements as Practiced in the Deep-Space Network," Proceedings of the IEEE, Vol 95, No. 11, pp. 2202-2214, November 2007
- Kriehn G. and Wagner, K., "Photorefractive-Based Adaptive Antenna Array Processing using BEAMTAP," In *Controlling Light with Light: Photorefractive Effects, Photosensitivity, Fiber Gratings, Photonic Materials and More (PR)*, OSA, October 2007.
- Raeisi, R, "Ceiling Robot for Distance Learning," ASEE Regional Proceedings, Flag Staff, Arizona, January 2008
- Won, C., Zhou, H. , Lu, J. Zhang, Z. , and Ali, H. "Applications and Performances of Extended TTDDs in Large-Scale Wireless Sensor Networks", Proceedings of the 3rd International Conference of Mobile Ad-hoc and Sensor Networks (MSN'07), 2007.

### **Mechanical and Industrial Engineering (Dept)**

- Happawana, G, N. Rajapakse, and Y. Hurmuzlu 2007. *Journal of Systems and Control*. Vol. 221, No. 4, pp 673-685(13). Suppression of base vibrations and tracking of the tip of an inverted pendulum using sliding mode control & quantitative feedback theory.
- Happawana, G, N. Rajapakse, and Y. Hurmuzlu 2007. *Journal of Systems and Control Engineering, Part I*. Vol. 221, No. 5, pp 769-779(11). Suppression of heavy truck driver seat vibration using sliding mode control & quantitative feedback theory.
- Happawana, G, and N. Rajapakse 2007. *Journal of Automobile Engineering, Part D*. A nonlinear six degree-of-freedom axle and body combination roll model for heavy trucks' directional stability. (Submitted).
- Happawana, G, A. Premasiri, and G. S. Happawana 2007. ASME Journal of Biomedical Devices. Direct deionized water cooled semiconductor laser insert with microwave antennas imprinted balloon catheter for photodynamic therapy of esophageal carcinomas. (Submitted)
- Happawana, G., and V. V. Vantsevich 2008. *International Journal of Multi Body Dynamics*. Six wheel drive agriculture tractor with optimized traction. (Submitted).
- Happawana, G, A. Premasiri, and A. Rosen 2008. *Biomedical Optics*. Microwave heat generated, oxygen enhanced, tumor model for PDT of esophageal cancer. (Resubmitted after addressing reviewers' comments).

- Happawana, G, A. Premasiri, and A. Rosen 2008. ASME Journal of Electronic Packaging. Direct de-ionized water cooled semiconductor laser package for photodynamic therapy of esophageal carcinoma: design, and analysis (submitted).
- Happawana, G, A. Premasiri, and A. Rosen 2008. Biomedical Optics. Design, fabrication, and analysis of photodynamic therapy monitoring system for use in esophageal carcinoma. (Submitted).
- Peng, W., *Fundamentals of Turbomachinery*, published by John Wiley & Sons, January 2008
- Rai, R. and Campbell, M, "Qualitative and Quantitative Sequential Sampling," ASME Journal of Mechanical Design, Volume 130, #3, March 2008
- Rai, R. and Terpenney, J., "Classification and Design Principles for Managing Technological Obsolescence," IEEE Transactions on Components and Packaging, Special Issue on Electronic Part Obsolescence (Accepted for Pub.)
- Rai, R. and Campbell, M "Q2S2: Merging Qualitative Information in Sequential DOE," Proceedings of Design Engineering Conference ASME/DETC/DAC-34520, September 2007
- Rai, R., and Terpenney, J., 2008, "Designing Piggyback Product" *Design Studies (Submitted)*.
- Rai, R., Chang, X.and Terpenney, J., 2007 "DFM Ontology" *Journal of Engineering Design (Submitted)*
- Rai, R., and Campbell, M., 2008,"Graph Grammar and Tie Knots" Submitted to *Research in Engineering Design*.

• **Creative Activities:**

**Civil and Geomatics Engineering (Dept)**

Attard, T. CE 237: Dynamics of Structures. Fall 2007. This course had not been taught in several years. The course serves a very important segment of structural engineering and its revival is invaluable to the success and stability of the graduate student program

Attard, T. CE 232: Prestressed Concrete. Spring 2008. This course had not been taught in several years. The course serves a very important segment of structural engineering and its revival is invaluable to the success and stability of the graduate student program.

Munjy, R, Improved the GME123 class(Stereo Photogrammetry) by introducing soft copy photogrammetry

Munjy, R, Worked with Cardinal Mapping, Inc. in Florida to provide site license for their soft photogrammetry software.

Xiao, M, Established a Fresno State Student Chapter of California Geotechnical Engineers Association (CGEA).

Xiao, M, As faculty advisor of ASCE student chapter, advocate and facilitate the Steel Bridge Competition for the MidPac Conference.at which the Fresno State ASCE student chapter attended the steel bridge competition as one of the eight teams in April 2008.

**Construction Management (Program)**

None

**Electrical and Computer Engineering (Dept)**

Albandakji, R. Revised ECE128L (Electronics I) Laboratory manual. The old manual was written many years ago and it seemed to me that it has not been updated for many years; it also contained some lab experiments that were not suitable for the lab equipment available in the Electronics lab. The new manual contained 10 different experiments all related to the material including a quick background on the experiment, pre-lab preparation, and pre-lab simulation using Multisim.

Albandakji, R. Revised ECE138L (Electronics II) Laboratory manual. The old manual was written many years ago and it seemed to me that it has not been updated for many years; it also contained some lab experiments that were not suitable for the lab equipment available in the Electronics lab. The new manual contained 9 different experiments all related to the material including a quick background on the experiment, pre-lab preparation, and pre-lab simulation using Multisim.

Albandakji, R. Extensively used Power-Point presentations in ECE102, ECE128, and ECE138 in order to break down the material and illustrate advanced concepts by using digital media, such as figures, plots, tables, animations

Albandakji, R. Provided in-class circuit simulations related to the broad material covered in ECE102 (Advanced Circuits). These live simulations seemed to stimulate students' attention and enhance their computer simulation skills.

Bengiamin, N. Created a new undergraduate course on Power Electronics. This course includes a lab component and it utilizes Matlab extensively. In addition to lecture material, this course required acquiring and integrating all needed hardware.

Bengiamin, N. Created a new graduate course. In addition to lecture material, this course includes a major lab component. It required acquiring all needed hardware, integrating it, setting it up, testing it, and designing experiments

Heaney, A. Performed course revisions for ECE106, ECE115, ECE132

Heaney, A. Performed new course development for ECE 91

Kriehn, G. Implementing NCIIA Grant with Dr. Hank Delcore, Anthropology along with Lyles Center for Innovation and Entrepreneurship Both of our interdisciplinary E-Teams projects have won regional and national competitions in Spring 2008 at both Regional and National levels. The Lyles Center for Innovation and Entrepreneurship has also been involved.

Kriehn, G. Used funding from Edwards Air Force Base for the development of the Optical Communications Laboratory which in turn allowed Optical Communications to be taught for the first time using both theoretical and experimental concepts.

Kriehn, G. CETL Award for Fall 2008

Kriehn, G. RAA Award for Fall 2008

Kriehn, G. Developed a new Core Curriculum for the M.S. Engineering – Electrical Engineering Option and received approval within the College for starting a M.S. Engineering – Computer Option. University level approval will be sought for Fall 2008.

Raeisi, R, Revitalized the ECE118 and ECE 120L. Developed a new laboratory environment for the ECE 120L with newest industry verified microcontroller technology.

Raeisi, R, Revitalized the ECE 118 by totally introducing a new microcontroller technology class as practiced and taught across many know institutions.

Won, C., For ECE120L, developed 8 new lab sessions using Altera DE2 FPGA Board

Won, C., For ECE146, Developed 3 OpNET™ Lab assignments and two TCP/IP Socket Programming Hands-on Sessions

Won, C., For ECE176, Developed two lab sessions using Verilog and Altera DE2 FPGA Board

Won, C., For ECE85L, Developed 10 Lab sessions for Digital Logic Designs

### **Mechanical and Industrial Engineering (Dept)**

Rai, R. Worked on revision of undergraduate ME undergraduate curriculum

Rai, R. Session chair ASME DETC Conference

Sanchez, M. Co-organizer of 2008 Central California Engineering Design Challenge

Sanchez, M. ASME HPV West Coast Competition; received 3<sup>rd</sup> place in utility HPV competition

Mizuno, W. Developed, in conjunction with industry, air conditioning laboratory; used in ME 146 course

Mizuno, W. Revised content of ME159 Mechanical Engineering Laboratory to include new experiments using the gas turbine and Chevrolet V-6 dynamometer system.

Mizuno, W New project with industry partner FMC Food Tech for ME-155 Elements of System Design.

Shelley, J. Improved DL instruction for Dynamics class

Shelley, J. Developed summer “bridge” course for junior high students

Sorensen, I. Developed new course in industrial automation

• **Presentations:**

**Civil and Geomatics Engineering (Dept)**

- Attard, T.L. and Dhiradhamvit, K. (2008). "Higher-Mode Effects in Lead-Core-Rubber Base isolated Multi-Story Steel Buildings subjected to Near-field Excitations," 29<sup>th</sup> Annual Research Symposium, California State University, Fresno, Fresno, California.
- Attard, T.L. and Pnevmatikos, N.G., Gantes, C.J.,(2008). "Control Algorithm for Civil Structures Subjected to Earthquake Loading," 29<sup>th</sup> Annual Research Symposium, California State University, Fresno, California.
- Crossfield, J, The Annual California State University, Fresno Geomatics Engineering Conference. Presented at the Twenty First North American Surveying and Mapping Conference during the July 11-13, 2007 meeting in Big Rapids Michigan.
- Choo, C, "Investigation of Field Performances of Advanced Fiber Composite Fabrics in Infrastructure Application," 2008 Central California Research Symposium (CCRS), California State University Fresno, Fresno CA, April 16, 2008.
- Choo, C & Issam Harik, "Structural Deck Evaluation of the John A. Roebling Suspension Bridge," 8<sup>th</sup> Historic Bridges Conference, the Ohio State University, Columbus OH, April 28-29, 2008.
- Ogaja, C, "Space Geodesy, Surveyors Standpoint" at the 47th Annual Geomatics Engineering Conference on Jan. 26, 2008, Clovis, CA
- Xiao, M. (2008) "Pore structure variation of porous media under vibration". The 4th decennial Geotechnical Earthquake Engineering and Soil Dynamics Conference. Session: Dynamic Properties. May 18-22, 2008. Sacramento, CA.
- Xiao, M. "Erosion and stability of California's levee system – Current status and research" SELSOC monthly meeting, May 14, Fresno, CA.
- Xiao, M. and Soria, D. "Internal erosion mechanisms of heterogeneous soils". The 29<sup>th</sup> Annual Central California Research Symposium, Fresno, CA. April 15, 2008.
- Xiao, M. "Rainfall erosion resistance of various compost soils on roadside embankment". 2008 Annual Congress of Geo-Institute of ASCE. March 9-12, 2008. New Orleans, LA.

**Construction Management (Program)**

- Charalambides, J. "Developing a Computer Assisted Multi-Disciplinary Decision Making Platform," Structural Engineering Institute 2008 Congress, Vancouver, Canada, April 24-26, 2008

**Electrical and Computer Engineering (Dept)**

- Hecht, R. "Antenna Shaping Using Min Max Optimization," Proceedings of the 2007 International Conference on Scientific Computing, Las Vegas, Nevada, June 25-28, 2007.
- Kriehn G. and Wagner, K., "Photorefractive-Based Adaptive Antenna Array Processing using BEAMTAP," In *Controlling Light with Light: Photorefractive Effects, Photosensitivity, Fiber Gratings, Photonic Materials and More (PR)*, OSA, October 2007.
- Lee, C-H., Ritz, C., and Lagally, M., "3-Dimensional Silicon-Germanium Quantum Dots on Freestanding Si Nanoribbon", at Nanoelectronics Devices for Defense & Security Conference, 2007

**Mechanical and Industrial Engineering (Dept)**

- Happawana. G., "Design, fabrication and analysis of a semiconductor photonic oxygen detection device" at Symposium on Biomedical Optics, January 24, 2008.
- Mizuno, W., VIP presentations to students at Clovis Center, FCC, Reedley College.
- Sanchez, M. "Prediction of uncertainty and confidence intervals in thermal radiative modeling using the Monte Carlo ray-trace method," at the Central California Research Symposium, April 16 2008.

• **Honors:**

**Civil and Geomatics Engineering (Dept)**

Attard, T, Elected North American Chairman and Organizer of the 11<sup>th</sup> *Pan-American Congress of Applied Mechanics*, PACAM XI, Volume 13, Flrionopolis, Brazil, 2010.

Attard, T, Selected as the ASCE 2007 Professor of the Year.

Attard, T, Promising New Faculty Provost's Award, 2007 – 2008.

Larralde, J, *Outstanding Civil Engineering Faculty Advisor Award in the State Of California* Awarded by American Society of Civil Engineers, Region 9, State of California February 2008

Larralde, J, *Outstanding Civil Engineering Mentor*, Awarded by the San Francisco Section, American Society of Civil Engineers November 2007

**Construction Management (Program)**

None

**Electrical and Computer Engineering (Dept)**

Bengiamin, N, Nominated for the College of Engineering 2008 "Teacher of the Year Award".

Bengiamin, N, Nominated for the University 2008 "Outstanding Advisor Award".

Kriehn, G, Provost's Award for Excellence in Teaching and Scholarship (Fall 2007)

Kriehn, G, Nominated for the Mac Van Valkenburg Early Career Teaching Award (Summer 2007)

**Mechanical and Industrial Engineering (Dept)**

None

• **Grants:**

**Civil and Geomatics Engineering (Dept)**

- Attard, T, CalTrans Proposal with FCI (October 2007). "Monitoring and Possible Damage Detection in Newly-Constructed Rapid-Set® Panels along Highway 99," \$6,700 + \$55,000 (PI).
- Attard, T, Carbon-Wraps Donation (April 2008). Donation of Carbon-Wraps to be used with the Bridge Column Tests as part of the Carbon RAA. Donation was made by BASF (Contact Jeff Moseley). \$6,374.
- Attard, T, NSF Travel Grant through NEESInc and the University of Colorado "MR Damper FHT Workshop on August 6-7 at the University of Colorado," for T. Attard and R. Dansby. (\$800 each two mini grants) - \$1,600.
- Attard, T, Nolte Engineers, "Dynamic Analysis of Above Ground Steel Tanks for Water Storage And Design Retrofit Solutions" 2008. \$5,600. PI
- Attard, T, Brooks-Ransom Engineers and California Department of Transportation, "Bridge Health Monitoring and Prestress, damping, modal, and temperature losses at Hwy 168 at Temperance in Clovis, CA," 2008 – 2009. \$10,142
- Attard, T, Cornerstone Engineers, "Bridge Health Monitoring and Prestress, damping, modal, and temperature losses at Hwy 168 at Temperance in Clovis, CA," 2008 – 2009. \$2,000
- Attard, T, Efcu Corporation In-Kind Donation, "Bent Cap Pier FormWork: A Near-Field CFRP analysis study of the 99 Overpass in Selma, CA," 2008. \$12,000. PI.
- Attard, T, California State University, Fresno, "Provost's Scholarships for new Graduate Students," 2008 – 2010. \$16,000. PI.
- Attard, T, Claude C. Laval Jr. Award for Innovative Technology and Research, "Using MR Fluid Dampers to Protect Medical Facilities during "Pulse" Type Earthquakes" 2008, \$5,000. PI
- Attard, T, Graduate Faculty Enhancement Award "Protecting Buildings and Lives during Earthquakes" 2008, \$5,000. P
- Attard, T, Research Activity Awards, funded by California State University, Fresno (May 2008), "Investment in the Future: Research Activity Award (RAA): Protecting Non-structural Components and Reducing Seismic Vulnerability in Wood Homes using Carbon Shear Walls," 2008. \$15,000. PI.
- Munjy, R, Using Network GPS for Airborne GPS Photogrammetry, CALTRAN, \$84,525, July 2006-June 30, 2007.
- Munjy, R, Standards for Block Configuration Airborne GPS Controlled Photogrammetry for Large Scale Mapping Projects, CALTRAN, \$199,617, April 2008-April 2009.
- Wright, W., "Origins and Management of Odiferous Micropollutants in Potable and Non-Potable Domestic Water Supplies." Research, Scholarship, & Creative Activities (RSCA) for (AY 2008-09)
- Xiao, M, Research Activity Awards (RAA), funded by CSU Fresno, \$25,000. "Investigating unstable flow in soils and its impact on groundwater contamination". Co-PI. 2008-2009.
- Xiao, M, Research Activity Awards (RAA), funded by CSU Fresno, \$25,000. "Investment in the Future: Soil-Structure Interaction for Earthquake Applications". Co-PI. 2007-2008.
- Xiao, M, Award for Research, Scholarship and Creative Activities (RSCA), funded by CSU Fresno, "Seepage Study and Levee Design for the San Joaquin River Restoration Project", \$5,000. 2007-2008.
- Xiao, M, Graduate Faculty Enhancement Award, \$4000, 2008~2009.

**Construction Management (Program)**

None

### **Electrical and Computer Engineering (Dept)**

Lee, C-H, Asylum Research, Inc, "Video rate AFM probes, -phase II manufacturing, \$35,517 (2008)

Kinman, P. and Nunna, R, Jet Propulsion Laboratory, "Advanced Transponder and Advanced Receiver" \$90,372

Kinman, P. and Nunna, R., Jet Propulsion Laboratory, "Radio Frequency Interference Analysis" \$90,372

Nunna, R. and Mizuno, W., Edwards AFB, "ECE and ME Labs and Student Professional Development." \$25,219

Nunna, R., Mizuno, W, Sanchez, M. and Sorensen, I. Edwards AFB, "ECE and ME Labs and Student Professional Development." \$100,160

### **Mechanical and Industrial Engineering (Dept)**

Mizuno, W. FMC Food Tech, \$7,200 for student project to develop engineering system

Mizuno, W., \$57,200 from industry for the VIP program

Sanchez, M. and Sorensen, I. \$22,000 laboratory enhancement grant from Air Force

Sorensen, I. \$6,000 grant from local company for work on electric downhole steam generator (EDSG)

• **Volunteer Service:**

**Civil and Geomatics Engineering (Dept)**

- Attard, T, Member, Structural Control Committee, 18th Analysis & Computation Specialty Conf.  
Attard, T, LSAMP Program Award/ Scholarship for Chase Wharton for AY 2007-2008.  
Attard, T, Reviewer, *International Journal of Mechanical Sciences*, 2008-present.  
Attard, T, Reviewer, *Structural Control and Health Monitoring*, 2008-present.  
Attard, T, North American Chairman and Editor, *11<sup>th</sup> Pan-American Congress of Applied Mechanics*, PACAM XI, Receifo, Brazil, January 4 – 8, 2010.  
Crossfield, J, Member of the Undergraduate Curriculum Subcommittee  
Crossfield, J, Board member for the Northern California Section of ACSM  
Crossfield, J, Faculty Advisor for SAGE, ACSM, the annual GME conference & the Foresight! Mag  
Crossfield, J, Member of the Clovis Community Band with seven performances during 2007-2008  
Crossfield, J, Volunteer helper for the Clovis Botanical Garden Summer Gala, July 28, 2007  
Crossfield, J, Recruiting trips to several junior colleges and high schools during 2007-2008  
Choo, C, (Associate Member) American Concrete Institute, ACI Committee 440 – Fiber Reinforced Polymer Reinforcement  
Choo, C, (Associate Member) Transportation Research Board (AFF80 – Structural Fiber Reinforced Plastics)  
Choo, C, (Reviewer) Journal of Bridge Engineering, American Society of Civil Engineers (ASCE)  
Choo, C, (Reviewer) Journal of Composites for Construction, American Society of Civil Engineers  
Larralde, J. Advisor: Student Chapter of Civil Engineering National Honor Society, *Chi Epsilon*  
Munjy, R. (ASCE) Moderator, Photo Aerial Triangulation, ASPRS 2008 Annual Meeting, May 2008, Portland.  
Ogaja, C. WInSAR Institutional Representative for Fresno State (Western North America Interferometric Synthetic Aperture Radar Consortium) is a consortium of universities and research laboratories established by a group of practicing scientists and engineers to facilitate collaboration in, and advancement of, Earth science research using radar remote sensing.  
Wright, W. Project Advisory Committee: Serving as a Project Advisory Committee member for the Water Reuse Foundation on a research project titled “Investigating the feasibility of a MBfR to achieve low nitrogen levels for water reclamation and reuse.” (Began in December 2006 and the activity concluded in the Fall of 2007).  
Wright, W. No-fee Professional Consulting for CSU Fresno: To help resolve a low water pressure problem with eye-wash units in the Science I building. (25 minutes).  
Wright, W. No-fee Professional Consulting for a Small Business: Assisted Aqua Azul Corporation in their pursuit of developing a computer program that would help them match UV light disinfection intensity to water characteristics. The unit design must meet state regulatory requirements. (2 hours).  
Xiao, M. Reviewer, ASCE Journal of Geotechnical and Geoenvironmental Engineering (4 papers)  
Xiao, M. Reviewer, Transactions of ASABE (1 paper)  
Xiao, M. GeoCongress 2008 (2 papers)  
Xiao, M. Member, Technical Committee of Geotechnics of Soil Erosion, ASCE Geo-Institute (2008- present)  
Xiao, M. Member, Technical Committee of Embankment, Dams, and Slopes, ASCE Geo-Institute (2008- present)  
Xiao, M. Session Chair: Effect of Erosion on Foundation. The International Foundations Congress and Equipment Expo '09 (IFCEE09), Orlando, FL.

**Construction Management (Program)**

None

**Electrical and Computer Engineering (Dept)**

- Kriehn, G., Coordinated with the IEEE student chapter and brought 3 student groups to compete at the IEEE Central Area Meeting this Spring.

Kriehn, G., Traveled to Tehachapi High School to give a presentation on College life at Fresno State. Organized and hosted Tehachapi High School students who came to visit during Senior Projects Day.

Kriehn, G., Hosting a Fedora Repository with over 100 packages to serve the Enlightenment Windows Manager E17 for Linux. The repository is located at <http://optics.csufresno.edu/~kriehn/fedora/repository.html> and is used by people worldwide. I am currently coordinating with the Fedora Development team to incorporate these packages into the actual Fedora Linux Distribution, hopefully in time for Fedora 10.

Lee, C-H, Reviewed manuscript # 08-TIE-0495 entitled "A PZT-driven atomizer based on a vibrating flexible membrane and micro-machined trumpet-shaped nozzle array" for the Transactions on Industrial Electronics

Won, C., Coaching Reyburn Junior High School Robotics Teams (Two Teams)

**Mechanical and Industrial Engineering (Dept)**

Rai, R. Reviewed papers for Journal of Mechanical Design, Research in Engineering Design, Journal of Engineering Design, Computer Aided Design (CAD), International Journal of Production Research (IJPR), (total 5 papers)

Loscutoff, W. SAE Formula 1 racing car competition at the California Speedway in Fontana, CA)

Mahanty, S, President, Hindu Temple of Fresno. Construction New Temple. Fundraising)

Mahanty, S, ASME - SPDC on Campus

Mizuno, W. Academic Decathlon judge

Sanchez, M. Co-organizer of 2008 Central California Engineering Design Challenge

Sanchez, M. ASME HPV West Coast Competition; received 3<sup>rd</sup> place in utility HPV competition

Sanchez, M. Faculty advisor for the Human Powered Vehicle club.

Sanchez, M. Faculty advisor for the Society of Women in Engineering (SWE) student chapter.

Sorensen, I. Co-organizer of 2008 Central California Engineering Design Challenge

Sorensen, I. Advisor for the CSUF team for the ASME Student Design Competition.

Sorensen, I. Faculty advisor for the Mechatronics club competing in the Battlebots competition in June 2008.