# **Steven Martin Vukazich**

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# Education

University of California at Davis, Ph.D., Civil Engineering, 1993 University of California at Berkeley, M.S. Structural Engineering and Structural Mechanics, 1984 University of California at Davis, B.S. With Highest Honors, Civil Engineering, 1983

# **Professional Registration**

**Structural Engineer No. S 3306**, State of California, 1990-present **Civil Engineer No. C 41217**, State of California, 1987-present

# **Professional and Academic Experience**

# ◆ PROFESSOR, DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING (CEE), SAN JOSE STATE UNIVERSITY, 1993-PRESENT

Duties include administration of the CEE department, teaching undergraduate and graduate courses, committee service, undergraduate and graduate student advising, professional service, community service, and research.

**Undergraduate Courses** 

CE 95 – Theory and Application of Statics

CE 99 - Statics

CE 112 - Mechanics of Materials

CE 140 - Geotechnical Engineering

- CE 160 Structural Analysis
- CE 161 Indeterminate Structural Analysis
- CE 163 Structural Steel Design
- CE 164 Design of Wood Structures

# Graduate Courses

CE 210 - Advanced Mechanics of Materials

- CE 212 Dynamics of Structures
- CE 216 Finite Element Analysis
- CE 260 Matrix Structural Analysis

### Administrative Experience

### Department Chair, August 21, 2007 to August 20, 2008

#### Acting Department Chair, January 21, 2003 to August 20, 2003

Duties as the administrative head of the CEE department include:

- Administration of CEE department budget and accounts;
- Coordination of program assessment and ABET and WASC reports;
- Schedule preparation and administration;
- New student advising and recruitment;
- Coordination of fundraising efforts;
- Administration of CEE office and coordination of staff duties;
- Performance review of CEE department staff and part-time CEE faculty;
- Staffing of CEE courses and CEE faculty appointments.

### Department of Civil and Environmental Engineering Undergraduate Advisor,

1993 – Present

Duties as CEE Department Undergraduate Advisor include:

- Advising of incoming freshman and transfer students;
- Mandatory advising of CEE students each semester;
- Check and process university Major Forms for graduating students;
- Provide information to prospective incoming and transfer students;
- Maintain advising records of all CEE undergraduate students;

### Department of Civil and Environmental Engineering Graduate Coordinator, Fall 1997–Spring 2000

Duties as CEE Department Graduate Coordinator include:

- Processing Graduate Standing Summaries (GSS) for new Graduate students;
- Providing information to prospective graduate students;
- Outreach to promote the CEE Graduate program;
- Create and maintain records of all CEE graduate students;
- Working with CEE Graduate students and the Office of Graduate Studies and Research to ensure all graduation requirements are met.

# Committee Service

### University

- Student Fairness Committee Academic Year (AY) 05-06, AY 06-07
- FMI Appeals Review Committee, AY 99-00

### College of Engineering

- Research Committee, AY 14-15
- Designated Faculty Advisor (DFA) AY 14-15
- RTP Committee, AY 08-09, 11-12, 13-14
- Associate Dean Recruitment Committee, AY 03-04
- Student Recruitment and Retention Committee, AY 04-05, AY 05-06
- Sabbatical Committee, AY 04-05, 09-10, 12-13
- Dean's Excellence in Teaching Task Force, AY 02-03
- Curriculum Committee, AY 02-03
- Student Affairs Committee, AY 93-94 to AY 98-99, AY 01-02
- Graduate Studies and Research Committee, AY 99-00, AY07-08
- Master Faculty Advisor (MFAT), Spring 2008 (inception) Fall 2010

### **Department of Civil and Environmental Engineering**

- RTP Committee, AY 99-00, AY 06-07 (committee chair), AY 07-08 to present
- Faculty Search Committee, AY 07-08 (committee chair)
- Department Chair Review Committee, AY 99-00, AY 06-07 (committee chair)
- Curriculum Committee, AY 02-03 to present
- Scholarship Committee, AY 02-03
- Executive Committee, AY 98-99 to AY 02-03
- Assessment Task Force, AY 01-02
- Structural Engineering MS Oral Exam Committee, AY 93-93 to present
- CONSULTING STRUCTURAL ENGINEER, THORNTON WEILER, AIA, ALAMEDA, CA 2013-present
- ◆ CONSULTING STRUCTURAL ENGINEER, FRAMEWORK ENGINEERING, SAN ANSELMO, CA 2004-2008
- ◆ SENIOR ASSOCIATE INSTRUCTOR, DEPARTMENT OF CIVIL ENGINEERING, U.C. DAVIS, 1989-1993
- ♦ STRUCTURAL ENGINEER, PETER CULLEY AND ASSOCIATES, SAN FRANCISCO, CA 1984-1989

# **Selected Grants Awarded**

- Muraleethan, K. K. (PI/PD, University of Oklahoma), Cerato, A. (Co-PI/PD, University of Oklahoma), Miller, G. (Co-PI/PD, University of Oklahoma), Vukazich, S. M. (Co-PI/PD, San Jose State University) Sritharan, S. (Co-PI/PD, Iowa State University), "NEESR-SC: Understanding and Improving the Seismic Behavior of Pile Foundations in Soft Clays". Total Award from NSF of \$1,151,511 (Award \$163,476 for SJSU Project Director Vukazich) for a project period of October 1, 2008 September 30, 2012(one-year extension to September 30, 2013).
- Selvaduray, G. S. and Vukazich, S. M. "California Seismic Safety Commission Field Act Research Study" February 5, 2008 – October 31, 2009. Award of \$348, 306 from the California Seismic Safety Commission.
- Chai, Y., H. and Vukazich, S. M., "CUREE-Caltech Woodframe Project Task 1.4.3: Seismic Behavior of Cripple Walls" October 1, 1999 March 31, 2001. Award of \$150,000 from FEMA.
- Vukazich, S. M., "City of San Jose Multi-Unit Seismic Safety Program" 1997. Award of \$19,200 from the City of San Jose Office of Emergency Services.
- Vukazich, S. M., "City of San Jose Residential Seismic Safety Program" 1996 Award of \$6000 from the City of San Jose Office of Emergency Services.

# **Selected Publications**

- Muraleethan, K. K., Cerato, A., Miller, G., Vukazich, S. M., Sritharan, S., "NEESR- SC: Understanding and Improving the Seismic Behavior of Pile Foundations in Soft Clays-Final Report for award 0830328". The final report was approved by Richard J. Fragaszy of NSF on January 24, 2014.
- Vukazich, S.M., Selvaduray, G.S., "The Field Act and its Relative Effectiveness in Reducing Earthquake Damage in California Public Schools", *California Seismic Safety Commission*, Report No. CSSC 2009-02, October 2009.
- Muraleethan, K. K., Arulmoli, K., Baez, J.I., Cerato, A.B., Miller, G.A., Sritharan, S., Vukazich, S. M. "Seismic Behavior of Pile Foundations in Improved and Unimproved Soft Clays". *Proceedings of NSF Engineering and Research Conference*, Honolulu, HI, 2009.
- Vukazich, S.M., Selvaduray, G.S., Tran, J., "Conducting a Soft First-Story Multifamily Dwelling Study: An Example Using Santa Clara County, CA", *Earthquake Spectra*, EERI, Vol. 22 No. 4 November 2006, 1063-1079.
- Chai, Y.H., Hutchinson, T.C., Vukazich, S. M., "Quasi Static Reversed Cyclic Response of Level and Stepped Cripple Walls" *Journal of Structural Engineering*, ASCE, Vol. 129 No. 5 May 2003, 567-575.
- Vukazich, S.M., Marek, P., "Structural Design Using Simulation Based Reliability Assessment", *Acta Polytecnica*, Czech Technical University Publishing House, Vol. 41 No. 4-5/2001 February 2002, 85-92.
- Vukazich, S.M., Mish, K.D., Romstad, K.M., "Nonlinear Dynamic Analysis of Structural Frames Using Lanczos Modal Analysis," *Journal of Structural Engineering*, ASCE, Vol. 122 No. 12 December 1996, 1418-1426.
- Vukazich, S.M., Negro, P., Primi, S., Colombo, A., "Performance of a Repaired Four-Story Reinforced Concrete Frame Using Carbon Fiber Reinforced Polymer Jackets", *Proceedings of the 7th US National Conference on Earthquake Engineering*, EERI (CD-ROM), Boston, MA, July 21 – July 25, 2002.
- Vukazich, S.M., Marek, P., Fischer, O., "Uncertainty Assessment by Means of Simulation", Proceedings of the 7th US National Conference on Earthquake Engineering, EERI (CD-ROM), Boston, MA, July 21 – July 25, 2002.
- Vukazich, S.M., *The Apartment Owner's Guide to Earthquake Safety*, City of San Jose (adopted by The Association of Bay Area Governments (ABAG), August 1998. http://resilience.abag.ca.gov/wp-content/documents/City-of-San-Jose-Apartment-Earthquake-Safety.pdf

# Awards and Honors

## Teaching

San Jose State University College of Engineering Excellence in Teaching Award, 1998 San Jose State University College of Engineering Teacher Scholar, 1997 Who's Who Among America's Teachers, 1994 UC Davis Outstanding Graduate Student Teaching Award, 1991

#### Research

California State University Research Award 1993, 1995 Toward Outstanding Postgraduate Study (TOPS) Award, 1989

#### **Student Awards and Scholarships**

UC Davis Civil Engineering Department Citation 1983 University of California Regents Fellowship 1984, 1991 Cyril Smith Scholarship 1978-1984, 1989-1991 Bloss Memorial Scholarship 1978-1983

#### **Honor Societies**

Chi Epsilon (Civil Engineering) Tau Beta Pi (Engineering) Pi Mu Epsilon (Mathematics) Phi Kappa Phi (All Academic Fields)

# **Professional Affiliation**

Member of the Structural Engineers Association of Northern California (SEAONC), 1984-present

Member of the Earthquake Engineering Research Institute (EERI), 1993-present