

CURRICULUM VITAE

Name: Andrew Stuart Whittaker
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Bio sketch

Andrew Whittaker is Professor in the Department of Civil, Structural and Environmental Engineering at the University at Buffalo, and serves as the Director of MCEER, the Institute of Bridge Engineering and the Structural Engineering and Earthquake Simulation Laboratory. He is a registered civil and structural engineer in the State of California. Whittaker served as the Vice-President and President of the Consortium of Universities for Research in Earthquake Engineering (www.curee.org) from 2003 to 2011, and on the Board of Directors of the Earthquake Engineering Research Institute (www.eeri.org) and the World Seismic Safety Initiative from 2008 to 2010. Currently, he is a member of the Advisory Board for the Southern California Earthquake Center. Whittaker made significant contributions to the first generation of tools for performance based earthquake engineering (FEMA 273/274, 1992-1997) and led the structural engineering team that developed the second generation of these tools (FEMA P58, 2000-2013). Whittaker serves on a number of national committees including ASCE 4, ASCE 7, and ASCE 43, and ACI 349. He is Chair of the ASCE Nuclear Standards Committee. Whittaker's contributions have been recognized through the 2017 ASCE Walter P. Moore Jr. Award and the 2017 ASCE Stephen D. Bechtel Jr. Energy Award. He is a Fellow of ASCE, SEI, and ACI. His research interests are broad and include earthquake and blast engineering of buildings, long-span bridges and nuclear structures. The US National Science Foundation, US Department of Energy, US Nuclear Regulatory Commission, US Federal Highway Administration, and Canadian Nuclear Safety Commission fund his research. Whittaker consults to federal agencies, regulators, consultancies, contractors, and power utilities in the United States, Canada, United Kingdom, Europe and Asia.

Education

Degree: Ph.D., University of California, Berkeley, CA, 1988
Major: Structural Engineering
Thesis: Seismic behavior of dual steel framing systems
Degree: M.S., Civil Engineering, University of California, Berkeley, CA, 1985
Degree: B.E., Civil Engineering, University of Melbourne, Victoria, Australia, 1977

Professional Registration

Civil Engineer, California, No. C045013
Structural Engineer, California, No. S03618

Employment History

University at Buffalo, Director, SEESL, 2016-present
University at Buffalo, Director, Institute of Bridge Engineering, 2014-present
University at Buffalo, Deputy Director, SEESL, 2014-2016
University at Buffalo, Director, MCEER, 2011-present

University at Buffalo, Chair, Department of Civil, Structural and Environmental Engineering, 2010-2016

University at Buffalo, Director, NEES@Buffalo, 2009-2011

University at Buffalo, Deputy Director, NEES@Buffalo, 2005-2007, 2008-2009, 2011-2012

University at Buffalo, Buffalo, New York, Professor, 2004-present

University at Buffalo, Buffalo, New York, Associate Professor, 2001-2004

University of California, Berkeley, California, Associate Director, PEER, 1998-2000

University of California, Berkeley, California, Associate Director, EERC, 1992-1997

Forell/Elsesser Engineers, San Francisco, California, Senior Engineer, 1989-1991

Connell Wagner Group, Melbourne, Australia, Senior Engineer, 1978-1984

Professor, University at Buffalo, (2004-present)

Dr. Whittaker is Professor and Chair in the Department of Civil, Structural, and Environmental Engineering at the University at Buffalo (UB) and the Director of the NSF-funded earthquake research center, MCEER. He served for 7 years as President of the Consortium of Universities for Research in Earthquake Engineering (CUREE), which is a not-for-profit corporation in the United States. In 2010-2011 he served on a National Research Council committee to develop a 20-year research agenda for earthquake engineering research in the United States; he was the only academic structural/geotechnical engineer on the committee.

Dr. Whittaker has led the development of multidisciplinary proposals including the \$30M USD NEHRP Consultants Joint Venture, which was a joint venture of CUREE and the Applied Technology Council. Dr. Whittaker served as a member of the Board of Directors for the Earthquake Engineering Research Institute (EERI) from 2008-2010, as a member of the Board of Directors for the World Seismic Safety Initiative (WSSI) from 2008-2010, and currently serves on the Advisory Committee of the Southern California Earthquake Center.

Dr. Whittaker's current research interests include

- Seismic protective systems for bridges, buildings, infrastructure and nuclear power plants: new isolation systems; analytical models for isolators; system response
- Performance-based earthquake engineering: procedures for loss computations; scaling earthquake ground motions; simplified methods of analysis
- Seismic behavior of low aspect ratio walls of conventional and composite (SC) construction; performance assessment; predictive equations; fragility functions
- Blast engineering of bridges, buildings and infrastructure: clearing effects; material models at high strain rates; progressive collapse; hydrocode analysis; ground shock
- Nuclear structures: fragility evaluation of conventional and isolated power plants; modular SC construction for Gen III+ plants; Gen IV power plants; seismic isolation; advanced seismic PRA
- Seismic hazard analysis: hazard characterization for performance-based design; near-fault shaking; site amplification; rotational components of ground motion

Dr. Whittaker teaches undergraduate and graduate classes at the University at Buffalo, including

- Undergraduate: CIE 324, Introduction to design
- Undergraduate: CIE 423, Structural engineering III
- Undergraduate: CIE 428, Steel design
- Undergraduate: CIE 429, Reinforced concrete design
- Undergraduate: CIE 416, Capstone design

- Graduate: CIE 525, Reinforced concrete
- Graduate: CIE 618, Blast engineering
- Graduate: CIE 619, Structural dynamics and earthquake engineering II

Associate Professor, *University at Buffalo, (2001-2004)*

Associate Director, *Pacific Earthquake Engineering Research Center, (1998-2000)*

Dr. Whittaker served as the Associate Director of the Pacific Earthquake Engineering Research (PEER) Center. In this capacity, he served as a member of the Research Executive Committee, worked with the Director to draft the research and strategic plans for the Center, and directed the PEER Business and Industry Partnership (BIP) program and Implementation Advisory Board.

Associate Director, *Earthquake Engineering Research Center, (1993-1998)*

Dr. Whittaker was the technical director of the Earthquake Engineering Research Center (EERC) from 1993 to 1998, managing research activities and large-scale experimental facilities. He taught graduate and undergraduate classes in the Department of Civil Engineering at the University of California at Berkeley, developed and executed research projects and programs with federal and state agencies and private consortia, participated in workshops and short courses organized by the department and EERC, led the effort to upgrade the Berkeley earthquake simulator, and conducted research on steel structures and protective systems utilizing the Center's large-scale dynamic testing facilities.

Consultant, *(1992-present)*

Dr. Whittaker has provided consulting, peer-review and expert-witness services to private companies, local, state, and federal government agencies in the United States, South America, Europe, United Kingdom, Russia, Australia, and Asia. A focus of his consulting work is the application of performance-based seismic design and advanced blast engineering to long-span bridges, tall and ultra-tall buildings and power-related infrastructure. Fields of work related to earthquake engineering include long- and short-span bridges, historic structures, ultra-high-rise buildings, oil and gas production and transmission infrastructure, nuclear power and waste storage facilities, U.K. MoD marine assets, nuclear-safety-related buildings and dry docks, mission-critical buildings and infrastructure, towers, airport infrastructure, and monumental buildings. *Projects include:* **Buildings:** U.S. Court of Appeals Building, San Francisco; New Zealand Parliament buildings, Wellington, New Zealand; San Francisco City Hall, San Francisco, CA; Pioneer Courthouse, Portland, OR; Green Library, Stanford, CA; New Zealand National Museum, Wellington, New Zealand; WDI Disney Resort parking structure, Anaheim, CA; Caltrans OCTMC, Irvine, CA; Santa Clara Police Facility, Santa Clara, CA; Universal headquarters building; Los Angeles, CA; Church of the Year 2000, Rome, Italy; LA Cathedral; Los Angeles, CA; AboveNet web-hosting facility, San Francisco, CA; Maples Pavilion, Stanford, CA; Prada building, San Francisco, CA; Ara Pacis Museum, Rome, Italy; SouthBay Tower, San Jose, CA; Microsoft Gibraltar data center, Seattle, WA; Kourion timber structures, Cyprus; New de Young Museum, San Francisco, CA; King County Courthouse, Seattle, WA; Tarabya Hotel, Istanbul, Turkey; CYTA telecom building retrofit program, Cyprus; Bosphorus residences, Istanbul, Turkey; Nordstrom building, Los Angeles, CA; St. Francis Towers (2×60-story towers), Manila, Philippines; Diamond of Istanbul (65 stories), Istanbul, Turkey; Soyuk Tower (30 stories), Istanbul, Turkey; Los Faros de Panama (1×95 stories, 2×78 stories), Panama City, Panama; Glasgow International Airport, Glasgow, UK (blast analysis and design); Capital Partners Towers (2×42 stories) and Residential Buildings (2×18 stories), Almaty, Kazakhstan; Qatar National Bank (600 m), Doha, Qatar; Torre Reforma (57 stories), Mexico City, Mexico; Sahiba Gokcen International Terminal Building, Turkey; Shanghai Tower (600 m), Shanghai, China; MAK Hyatt (41 stories), Mongolia; **Bridges:** Benicia-Martinez bridge, Benicia, CA; Ferrocarril Viaduct, Caracas, Venezuela; Willamette River bridge, Portland, OR; Stutson Bridge, Rochester, NY; Marcy Bridge, Rome, NY; A30 Autoroute, Montreal, Canada; Gerald Desmond Bridge, Long Beach, CA; New Bridge over the

St. Lawrence Corridor, Montreal, Canada; Infrastructure: Trans-Alaskan Pipeline, Alaska; Caltrans SRMD Test Facility, San Diego, CA; San Francisco International Airport terminal, San Francisco, CA; JFK International Airport terminal, NY; HMNB Devonport SRC core pond building, Devonport, UK; BMS (Trident) cradles, Devonport, UK; BMS refit facilities, Devonport, UK; Ataturk International Airport terminal building, Turkey; HMNB Devonport Reactor Access Housing; Devonport, UK; Sutro Tower, San Francisco, CA (1999); Nuclear waste storage facilities, Hunterston, U.K.; Sakhalin I oil platform, Russia; Sakhalin II gas platforms, Russia; ANSTO nuclear reactor, Lucas Heights, Australia; Bakim airplane hanger, Ataturk Airport, Istanbul, Turkey; HMNB Clyde Faslane jetties, U.K.; LNG Tanks, Long Beach, CA.; LNG Tanks, Baja California, Mexico; Petrochemical facilities, Japan; Plum Point power station, Missouri; AWE Facilities, Aldermaston, UK; LNG Tanks, Quoddy Bay, Maine; Columbia Bottoms Well Field, St. Louis, Missouri; Beaver Stadium, PA; Sutro Tower, San Francisco, CA (2008); Transbay Transit Center, San Francisco; Tomakak (ITER) Fusion Reactor, Cadarache, France (2010); WEC AP1000 Fission Reactors (2010-2011), UK; Ft. Greely power plant, Alaska (2010); Tocumen International Airport terminal, Panama City, Panama; NuScale Small Modular Reactor, Corvallis, OR; TerraPower Power Reactor, Seattle, WA; Mexico City International Airport, Mexico City, Mexico. Special Structures: Fabrications, Museum of Modern Art, New York; Hermes Statue, Olympia, Greece; Oakland Cathedral, Oakland, CA; Energy facility, Los Alamos, NM; Giant Magellan Telescope, Chile.

Associate, *Forell/Elsesser Engineers; San Francisco, (1989-1992)*

Dr. Whittaker participated in numerous seismic rehabilitation projects including the development of seismic isolation systems for buildings; ground motion criteria for conventional and isolated building structures; peer review of the seismic isolation upgrade of the Parliament Buildings in Wellington, New Zealand; and the preparation of construction documents for the upgrade of the earthquake-damaged Green Library at Stanford University.

Senior Engineer, *Connell Wagner Group; Melbourne, Australia, (1978-1984)*

Dr. Whittaker's projects with the Connell Wagner Group included the design and construction supervision of the Victorian Arts Center and the Melbourne World Trade Center; design of two high-rise buildings (South Yarra Project); design of a casino and convention center; design of a 52-story building in Kuala Lumpur; and the design of a sports stadium to seat 70,000 patrons (VFL Park, Waverley).

Awards and Honors

Gold Award, James Lincoln Arc Welding Foundation, 1987

Outstanding 1998 Journal Paper, *Los Angeles Tall Buildings Structural Design Council*, "Evaluation of pre-Northridge moment resisting frame joints."

Outstanding 1998 Journal Paper, *Los Angeles Tall Buildings Structural Design Council*, "Evolution of seismic design practice in Japan."

Grand Award, 2002, *American Council of Engineering Companies*, "Seismic modernization of the new Ataturk International Airport, Istanbul, Turkey."

Diamond Award 2002, *New York Association of Consulting Engineers*, "Seismic modernization of the new Ataturk International Airport, Istanbul, Turkey."

Best Paper Award, 2002, *5th World Congress on Joints, Bearings and Seismic Systems for Concrete Structures*, "Cyclic behavior of high-damping rubber bearings."

Outstanding Journal Paper, 2003, *Los Angeles Tall Buildings Structural Design Council*, "Forensic studies of a large cover-plate steel moment-resisting connection."

Fellow, 2012, American Concrete Institute

Fellow, 2016, Structural Engineering Institute, American Society of Civil Engineers

Fellow, 2016, American Society of Civil Engineers

SEAS Senior Researcher Award, 2016, University at Buffalo

Walter P. Moore Jr. Award, 2017, American Society of Civil Engineers
Stephen D. Bechtel Jr. Energy Award, 2017, American Society of Civil Engineers

Professional Memberships and Committees

Dr. Whittaker is a member of the following professional organizations:

- American Concrete Institute
- Australian Earthquake Engineering Society
- American Institute of Steel Construction
- American Society of Civil Engineers
- American Society of Mechanical Engineers
- Earthquake Engineering Research Institute
- Structural Engineers Association of New York
- Structural Engineering Institute of the American Society of Civil Engineers

Dr. Whittaker serves on a significant number of state, national and international committees as listed below and is an active member of the design professional community in the United States.

American Association of State Highway and Transportation Officials (AASHTO)

- Member, Working Group, 2009 AASHTO Guide Specification for Seismic Isolation Design, 2008-present

American Concrete Institute (ACI)

- Member, Committee 349, Reinforced Concrete Nuclear Structures, 2001-present

American Society of Civil Engineers (ASCE)

- Member, ASCE Seismic Isolation Testing Standards Committee, 1995-2004
- Member, ASCE Task Committee on Seismic Isolation, 1996-2004
- Member, Steering Committee, Structural Engineers World Congress, 1997-1998
- Member, ASCE Task Committee on Supplemental Damping Systems, 1999-2004
- Member, Seismic Task Committee, ASCE Standard 7, 2000-2012
- Member, Main Committee, ASCE Standard 7, 2005-present
- Member, Seismic Analysis of Safety-related Nuclear Structures, ASCE Standard 4, 2007-present
- Member, Nuclear Standards Committee, 2010-present
- Chair, Nuclear Standards Committee, 2015-present
- Member and Task Committee Chair, ASCE Blast Standards Committee, 2003-present
- Member, ASCE Blast, Shock and Impact Committee, 2009-present
- Co-guest Editor, Journal of Structural Engineering, Vol. 134, No. 1, 2008
- Member, Ad-hoc Committee on Accreditation, 2016-present
- Member, SEI Codes and Standards Activities Division Committee, 2017-present

Applied Technology Council (ATC)

- Member, Technologies Team, ATC-33: Seismic Rehabilitation of Buildings, 1992-1997
- Member, Analysis Team, ATC-33: Seismic Rehabilitation of Buildings, 1992-1997
- Project Director, ATC-34: Study of *R* Factors and Critical Code Issues, 1993-2002
- Member, Steering Committee, ATC-15-8, US-Japan Workshop, August 2000

Structural Products Team Leader, ATC-58: Performance based earthquake engineering, 2002-2012
Member, Steering Committee, ATC-29-2 Seminar, October 2003
Member, ATC-SEI Awards Jury, Celebrating New Innovations in Seismic Strengthening Over the Past Decade
Project Director, ATC-82: Selection and Scaling of Earthquake Ground Motions, 2010-2012
Member, Project Management Committee, ATC-115, High Strength Reinforcement, 2014

Building Seismic Safety Council (BSSC)
Member, BSSC, PUC Technical Subcommittee 12, 1992-2005
Member, BSSC, Technical Subcommittee 2, 2006-present
Member and Subgroup Leader, Issue Team 4, Seismic Design Procedures, 2006-2009
Member, Issue Team on Response-History Analysis, 2010-2016
Corresponding Member, Issue Team on Shear Walls, 2016-present

California Department of Transportation (Caltrans)
Member, Caltrans SRMD Peer Review Panel, 1997-2000
Member, Caltrans Statewide Seismic Program Advisory Board, 1998-2001

Consortium of Universities for Research in Earthquake Engineering (CUREE)
Member, Board of Directors, 2001-2011
Chair, CUREE Future Research Projects Committee, 2001-2011
Vice President, 2003-2004
President, 2005-2011
Member, CUREE-Kajima, Joint Venture Management Committee, 2006-2011
Member, NEHRP Consultants (ATC-CUREE) Joint Venture Management Committee and Program Committee, 2007-2012

Department of Homeland Security (DHS)
Member, Peer Review Panel, Blast tolerance of steel building structures, 2004-2010

Earthquake Engineering Research Institute (EERI)
Co-chair, US-Australia Bilateral Commission on Earthquake Engineering, 2004-2010
Coordinator, International Programs, 8th USNCEE, 2005-2006
Member, Board of Directors, 2007-2010
Chair, Research Policy Committee, 2008-2010
Responsible Editor, Earthquake Spectra

National Academy of Science/National Research Council
Member, Committee on Earthquake Resilience—Research, Implementation and Outreach, 2009-2011

National Institute of Standards and Technology (NIST)
Member, Oversight Committee, Guidelines for Testing Passive Energy Dissipation Devices, 1998-2004

Southern California Earthquake Center (SCEC)
Member, External Advisory Committee, 2010-present

Structural Engineers Association of California (SEAOC)
Member, Ad-Hoc Energy Dissipation Systems Committee, 1995-1999

Structural Engineers Association of Northern California (SEAONC)

Member, Board of Directors, 1996-1998

Chair, Protective Systems Subcommittee, 1992-1999

United States Geological Survey (USGS)

Alternate Member, ANSS National Steering Committee, 2001-present

Chair, USGS_ANSS Structural Instrumentation Committee, 2004-2005

University of California, Berkeley (UCB)

Member, University of California at Berkeley Seismic Review Committee, 1996-2000

University of California, San Diego (UCSD)

Member, Academic/International Advisory Group, NSF NEESR Full-scale structural and nonstructural building system performance project, 2009-2012

World Seismic Safety Initiative (WSSI)

Member, Board of Directors, 2008-2011

Member, Board of Senior Advisors, 2011-present

Other

Member, International Scientific Advisory Committee, International Conference on Computational Methods for Smart Structures and Materials, Rome, Italy, 1998

Member, International Advisory Committee, Third International Conference on Behavior of Steel Structures in Seismic Areas, Montreal, Canada, 2000

Member, International Advisory Committee, Fourth International Conference on Behavior of Steel Structures in Seismic Areas, Naples, Italy, 2003

Member, International Advisory Committee, Fifth International Conference on Behavior of Steel Structures in Seismic Areas, Lehigh University, United States of America, 2008

Member, International Advisory Committee, Eighth International Conference on Shock and Impact on Structures, University of Adelaide, Australia, 2009

Member, International Advisory Committee, First International Conference on a Sustainable Built Environment, Sri Lanka, 2010.

Member, International Advisory Committee, Sixth International Conference on Behavior of Steel Structures in Seismic Areas, Chile, 2012

Professional Service

Dr. Whittaker reviews research proposals for U.S. National Science Foundation, Canadian Natural Sciences and Engineering Research Council, the Australian Research Council, and the University of Cyprus. He reviews manuscripts for the American Society of Civil Engineers (Journals of Structural Engineering, Engineering Mechanics, and Wind Engineering & Industrial Aerodynamics), American Society of Mechanical Engineers (Journal of Risk and Uncertainty in Engineering Systems), Bulletin of Earthquake Engineering, Earthquake Spectra, Earthquake Engineering and Structural Dynamics, International Journal of Protective Structures, Journal of Earthquake Engineering, Nuclear Engineering and Design, Reliability Engineering and System Safety, Soil Dynamics and Earthquake Engineering, the Structural Design of Tall Buildings, and the Journal of Sound and Vibration; and reviews papers for national and international conferences on earthquake, blast and structural engineering.

Dr. Whittaker serves on editorial boards for *The Structural Design of Tall Buildings*, *International Journal of Protective Structures*, and the *Electronic Journal of Structural Engineering*.

University Service

Member, University of California at Berkeley Seismic Review Committee, 1996-2000
Reviewer, National Science Foundation, Research proposals, 2000-present
Reviewer, Research Program, Department of Structural Engineering, Tokyo Institute of Technology, Yokohama, Japan, 2001
Reviewer, Research Program, Department of Civil and Environmental Engineering, University of Melbourne, Australia, 2001, 2003
Member, University at Buffalo Faculty Senate Tenure and Privileges Committee, 2002-present
Chair, External Advisory Board, UCSD-NEES project, University of California, San Diego, 2002-2004
Peer Review, USAID and ACEC, Washington, D.C., Applications for University Partnerships to Reduce Vulnerability to Seismic Hazards, 2003, 2003
Member, University at Buffalo Centers and Institutes Task Group, 2004-2005
Reviewer, National Science Foundation, Engineering Research Centers, 2005
Reviewer, National Science Foundation, CMMI, 2009
Reviewer, National Science Foundation, CMMI, 2011
Reviewer, National Science Foundation, CMMI, 2013

College Service

SEAS Academic Infraction Appeals Committee, 2002-2012
Chair, SEAS Chief Financial Officer Search Committee, 2015
Chair, SEAS-CAS Department of Materials, Design and Innovation Search Committee, 2015-2016
Chair, SEAS-CAS Department of Materials, Design and Innovation Search Committee, 2016-2017

Departmental Service

Chair, CSEE Educational Laboratories Committee, 2001-2005
Member, CSEE Undergraduate Studies Committee, 2001-2005
Coordinator, CSEE Ph.D. Qualifying Examination, 2002-2010
Coordinator, CSEE M.S. Comprehensive Examination, 2007-2010
Faculty Advisor, UB EERI Student Chapter, 2003-2010
Member, CSEE Search Committee, 2003-2004
Chair, Computational Mechanics Search Committee, 2006
Member, CSEE Graduate Studies Committee, 2005-2010
Deputy Director, NEES@Buffalo, 2005-2007
Deputy Director, NEES@Buffalo, 2008-2009
Member, MCEER Management Council, 2008-2011
Member, CSEE Search Committee, 2009-2010
Director, NEES@Buffalo, 2009-2011
Chair, 2010-2016
Deputy Director, NEES@Buffalo, 2011-2012
Director, MCEER, 2011-present
Director, Institute of Bridge Engineering, 2014-present

Deputy Director, SEESL, 2014-2016

Director, SEESL, 2016-present

Research Supervision

Ph.D. Degree, Advisor

Oscar Ramirez, University at Buffalo, co-advised with M. Constantinou (May 2000)

Position: Professor, Technical University of Panama

Taejin Kim, UC Berkeley, co-advised with B. Stojadinovic (May 2003)

Position: Managing Partner, Chang Minwoo, South Korea

Fei Deng, University at Buffalo (July 2004)

Position: World Bank, Washington, D.C.

Gordon Warn, University at Buffalo (June 2006)

Position: Associate Professor, Pennsylvania State University, College Park, PA

Claudia Marin, University at Buffalo (November 2006)

Position: Associate Professor, Howard University, Washington, D.C.

Yin-Nan Huang, University at Buffalo (June 2008)

Position: Associate Professor, National Taiwan University, Taiwan

Cevdet Gulec, University at Buffalo (June 2009)

Position: Associate Partner, Thornton-Tomasetti, Engineers, Los Angeles

Dhiman Basu, University at Buffalo, co-advised with Michael Constantinou (April 2012)

Position: Assistant Professor, Indian Institute of Technology, Gandhinagar

Jinwon Shin, University at Buffalo (May 2014)

Position: Research Fellow, University at Buffalo

Siamak Epackachi, University at Buffalo (December 2014)

Position: Research Fellow and Teaching Assistant Professor, University at Buffalo

Chandu Bolisetti, University at Buffalo (October 2014)

Position: Research Engineer, Department of Energy, Idaho National Laboratory

Manish Kumar, University at Buffalo (May 2015)

Position: Assistant Professor, Indian Institute of Technology, Mumbai

Manish Kumar, University at Buffalo (April 2015)

Position: Assistant Professor, Indian Institute of Technology, Gandhinagar

Jon Rivera, University at Buffalo (expected December 2017)

Position: Structural Engineer, Thornton Tomasetti, Boston, MA

Nam Nguyen, University at Buffalo (January 2016)

Position: Research Engineer, University of Melbourne, Melbourne, Australia

Bismarck Luna, University at Buffalo (January 2016)

Position: Structural Engineer, Praxair, Buffalo, NY

Brian Terranova, University at Buffalo (May 2017)

Position: Research Engineer, University at Buffalo, NY

Chingching Yu, University at Buffalo (expected May 2018)

Alok Abhay Deshpande, University at Buffalo (expected May 2018)

Justin Coleman, University at Buffalo (expected December 2018)

Ph.D. Dissertation Committees

Eric Wolff, August 2003 (Member)
Ani Natali Sigaher-Boyle, June 2004 (Member)
Panayiotis Roussis, September 2004 (Member)
Eleni Pavlou, May 2005 (Member)
Methee Chiewanichakorn, December 2004 (Member)
Jun Wang, May 2005 (Member)
Wasim Bahram, May 2005 (Member)
Darren Vian, December 2005 (Member)
Jeff Berman, February 2006 (Member)
Khalid Al-Gahtani, May 2006 (Member)
Wael Alnahhal, October 2006 (Member)
Xiaoyun Shao, December 2006 (Member)
Mehdi Ahmadizadeh, September 2007 (Member)
Xiaobo Luo, December 2007 (Member)
Hongbo Wang, December 2007 (Member)
Daniel Fenz, April 2008 (Member)
Mohamad Abdulhamid, May 2008 (Member)
Elvira Elvira, May 2008 (External Examiner, University of Melbourne)
Ioannis Kalpakidis, August 2008 (Member)
Dimitrios Lignos, August 2008 (External Examiner, Stanford University)
Alper Ucak, May 2009 (External Examiner, Catholic University of America)
Kiarash Dolatshahi, February 2012 (Member)
Hongwei Cai, June 2012 (Member)
Maria Cortes Delgado, June 2013 (Member)
Javad Hashemi, August 2013 (Member)
Michael Del Carpio, December 2013 (Member)
Nasi Zhang, May 2014 (Member)
Hanjin Hu, August 2014 (Member)
Afsoon Nickham, August 2014 (Member)
Juan Aleman, June 2014 (Member)
Zhang Zhongwen, November 2014 (External Examiner, Nanyang Technological University, Singapore)
Moses Matovu, July 2015 (Member)
Aikaterina Stefanki, February 2016 (Member)
Francisco Javier Hernandez Prado, June 2016 (External Examiner, University of Western Australia)
Shoma Kitayama, May 2017 (Member)
Cancan Yang, May 2018 (Expected, Member)

M. S. and M. Eng Degree, Advisor and External Examiner

Andrew Thompson, U.C. Berkeley, May 1999

Position: Associate, Arup Consulting, San Francisco, London

Troy Morgan, U.C. Berkeley, May 2000

Position: Managing Engineer, Exponent, NY

Taejin Kim, U.C. Berkeley, May 2000

Despoina Tsamandoura, University at Buffalo, December 2002

Hiram Badillo, University at Buffalo, August 2003

Position: PhD student, University of Barcelona, Spain

Janet Lane, University at Buffalo, August 2003

Position: Engineer, US Army Corps of Engineers, Cleveland

Edgard Escobar, University at Buffalo, May 2004

Position: Consulting engineer, Managua, Nicaragua

Michael Astrella, University at Buffalo, December 2004

Position: Associate Partner, Weidlinger Associates, New York

Ryan Cyr, University at Buffalo, January 2005

Cevdet Gulec, University at Buffalo, June 2005

Position: Associate Partner, Thornton-Tomasetti, Engineers, Los Angeles

Erick Burgos, University at Buffalo, July 2006

Position: Consulting engineer, San Salvador, El Salvador

Ionnis Christovasilis, University at Buffalo, August 2006

Position: Structural engineer, Athens, Greece

Nicholas Kipfer, University at Buffalo, May 2007

Position: Structural engineer, Birdair Associates, New York

Toshi Yoza, University at Buffalo, June 2007

Position: Structural engineer, Arup, Los Angeles

Graeme Ballantyne, University at Buffalo, August 2007

Position: Associate, Thornton-Tomasetti, Oakland, California

Brian Regan, University at Buffalo, May 2008

Robert Catalina, University at Buffalo, December 2008

Position: Structural engineer, C&S Companies, Syracuse, New York

Yu Su, University of Adelaide, January 2009, External Examiner

Laura Przybylski, University at Buffalo, January 2009, Co-advised with Professor Filiatrault

Position: Structural engineer, Canon Design, Buffalo, New York

Jeffrey Chambers, University at Buffalo, December 2008

Position: Structural engineer, Constellation Energy, Rochester, New York

Maikol Del Caprio Ramos, University at Buffalo (August 2009)

Position: Structural engineer, KPFF, Los Angeles, California

Daniel Gavahi, University at Buffalo (December 2009)

Position: Structural engineer, KPFF, Los Angeles, California

John Veith, University at Buffalo (December 2009)

Kar-Him Chiu, University at Buffalo (December 2009)

Position: Structural engineer, Arup, Hong Kong, China
Vikram Singan, University at Buffalo (May 2010)
Position: Structural engineer, FloaTECH LLC, Houston, TX
Chandrakanth Boliseti, University at Buffalo (December 2010)
Position: Research engineer, Department of Energy, Idaho National Laboratory
Pushkaraj Sherkar, University at Buffalo (August 2010)
Position: Structural engineer, Thornton-Tomasetti, Los Angeles
Joshua Rocks, University at Buffalo (February 2012)
Position: Structural engineer, Constellation Energy, Syracuse, NY
Basit Qayyum, University at Buffalo (August 2016)
Position: PhD student, Virginia Tech

M.S. Thesis Committees

Yehezkiel Tumewu, August 2016 (Member)
Maria Federova, November 2016 (Member)

Post-Doctoral Fellows and Research Engineers

Dr. Amir Gilani, Research Engineer; UC Berkeley, 1996-2000
Position: Senior Engineer, Caltrans, Sacramento
Dr. Juan Chavez, Research Engineer; UC Berkeley, 1996-1998
Position: Senior Engineer, ABS Consulting, San Francisco
Dr. Shakzod Takhirov, Research Engineer; UC Berkeley, 1997-2000
Position: Research Engineer, University of California, Berkeley
Mr. Hidemi Nakashima, Visiting Scholar, Shimizu Corporation; UC Berkeley, 1999
Position: Senior Engineer, Shimizu Corporation, Japan
Dr. Michio Yamaguchi, Post Doctoral Fellow, Tokyo Institute of Technology; UB, 2002-2003
Position: Senior Engineer, Nippon Steel Corporation, Japan
Dr. Taejin Kim, Visiting Scholar, SungKyunKwan University, Korea; UB 2008-2010
Position: Partner, Chang-Minwoo Consultants, Seoul, Korea
Dr. Yin-Nan Huang, Post Doctoral Fellow; UB 2008-2009
Position: Assistant Professor, National Taiwan University, Taiwan
Dr. Dhiman Basu, Post Doctoral Fellow; UB 2012
Position: Assistant Professor, Indian Institute of Technology, Gandhinagar
Dr. Caglar Akkaya, Post Doctoral Fellow; UB 2012
Position: Assistant Professor, Istanbul Technical University, Turkey
Dr. Manish Kumar, Post Doctoral Fellow; UB 2015
Position: Assistant Professor, Indian Institute of Technology, Gandhinagar
Dr. Siamak Epackachi, Post Doctoral Fellow; UB 2015-2016
Position: Teaching Assistant Professor, University at Buffalo
Dr. Manish Kumar, Post Doctoral Fellow; UB 2015-2016
Position: Assistant Professor, Indian Institute of Technology, Bombay

Dr. Gustavo Palazzo, Visiting Scholar, National Technological University, Argentina; UB 2016
Position: Professor, National Technological University, Mendoza, Argentina

Teaching

- 2000-2001:** CIE 423, Structural Engineering III
CIE 619, Earthquake Engineering and Structural Dynamics II
- 2001-2002:** CIE 525, Reinforced Concrete (incl. Enginet)
CIE 619, Earthquake Engineering and Structural Dynamics II (incl. Enginet)
- 2002-2003:** CIE 361, Civil Engineering Laboratory
CIE 428, Steel Structures
CIE 525, Reinforced Concrete (incl. Enginet)
CIE 619, Earthquake Engineering and Structural Dynamics II (incl. Enginet)
- 2003-2004:** CIE 525, Reinforced Concrete (incl. Enginet)
CIE 619, Earthquake Engineering and Structural Dynamics II (incl. Enginet)
- 2004-2005:** CIE 525, Reinforced Concrete (incl. Enginet)
CIE 428, Steel Structures
CIE 619, Earthquake Engineering and Structural Dynamics II
- 2005-2006:** CIE 525, Reinforced Concrete
CIE 428, Steel Structures
CIE 619, Earthquake Engineering and Structural Dynamics II
- 2006-2007:** CIE 428, Steel Structures
CIE 500B, Blast Engineering
CIE 525, Reinforced Concrete
CIE 619, Earthquake Engineering and Structural Dynamics II
- 2007-2008:** CIE 500B, Blast Engineering
CIE 525, Reinforced Concrete (incl. Enginet)
- 2008-2009:** CIE 429, Reinforced Concrete Design
CIE 500B, Blast Engineering
CIE 525, Reinforced Concrete
- 2009-2010:** CIE 429, Reinforced Concrete Design
CIE 500B, Blast Engineering
CIE 525, Reinforced Concrete
- 2010-2011:** CIE 500B, Blast Engineering
CIE 525, Reinforced Concrete
- 2011-2012:** CIE 525, Reinforced Concrete
CIE 500, Independent Study
- 2011-2012:** CIE 525, Reinforced Concrete
CIE 500, Independent Study (Earthquake Engineering)
CIE 500, Independent Study (Blast Engineering)
- 2012-2013:** CIE 525, Reinforced Concrete
CIE 500, Independent Study (Earthquake Engineering)

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| | CIE 500, Independent Study (Blast Engineering) |
| 2013-2014: | CIE 525, Reinforced Concrete CIE 618, Blast Engineering |
| 2014-2015: | CIE 525, Reinforced Concrete CIE 618, Blast Engineering |
| 2015-2016: | CIE 525, Reinforced Concrete CIE 618, Blast Engineering |
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