

# C U R R I C U L U M V I T A E

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### CONTACT INFORMATION

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### EDUCATION

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- Sep 2008 - present *Postdoctoral Scholar*  
University of California, Berkeley  
Health Monitoring of Fluid Dampers in Bridges
- May 2008 *Ph.D. in Civil and Environmental Engineering*  
University of California, Berkeley  
Earthquake Engineering: Seismic Isolation, Seismic Response of Building Contents,  
Seismic Response of Classical Monuments.  
Minors: Analytical Dynamics and Dynamical Systems; Applied Mathematics.  
Dissertation: Experimental and Analytical Studies on the Seismic Response of  
Freestanding and Anchored Building Contents
- Dec 2001 *MS in Civil and Environmental Engineering*  
University of California, Berkeley  
Thesis: The Rocking Spectrum and the Shortcoming of Design Guidelines
- Aug 1999 *BS in Civil and Environmental Engineering*  
University of California, Berkeley

### RESEARCH EXPERIENCE

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- 2008 - present Development and testing of a reliable scheme for monitoring the health of fluid viscous dampers in bridges via wireless communication.
- 2002-2008 PhD program at U.C. Berkeley.  
Topics of research:
- Dynamic Response Analysis of Rocking and Sliding Structures.
  - Seismic Response Analysis of Multi-drum Classical Columns and Monuments.
  - Experimental and Analytical Studies on the Seismic Response of Slender Laboratory Equipment (included a Comprehensive Shake Table Test Program at the Richmond Field Station Seismic Laboratory, UC Berkeley).
  - Performance of Bridge Bearings under Seismic Loading.

- 2000-2001 SEMM Masters program at U.C. Berkeley with emphasis on earthquake engineering and structural dynamics. *M.S. degree.*  
Masters Thesis: "The Rocking Spectrum and the Shortcomings of Design Guidelines."  
Also published as: Pacific Earthquake Engineering Center. Report No. PEER-01/07.

#### PROFESSIONAL SOCIETIES

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ASCE, American Society of Civil Engineers.  
ASME, American Society of Mechanical Engineers.  
ATC, Applied Technology Council  
EERI, Earthquake Engineering Research Institute.  
ICBO, International Committee of Building Officials.  
SIAM, Society for Industrial and Applied Mathematics.

#### PUBLICATIONS

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##### Books

Kelly, J.M. and Konstantinidis, D. *Seismic Isolation with Rubber*. Elsevier [in preparation].

##### Refereed Journal Papers

- Konstantinidis, D. and Kelly, J.M. "Experimental Study on the Seismic Response of Elastomeric Bridge Bearings." [in preparation].
- Konstantinidis, D. and Makris, N. "An Experimental Investigation on the Seismic Response of Anchored Laboratory Equipment." *Earthquake Spectra* [in preparation].
- Konstantinidis, D. and Makris, N. "Experimental and Analytical Studies on the Response of Freestanding Wooden Blocks and Laboratory Equipment to Strong Earthquake Shaking." *Earthquake Engineering and Structural Dynamics* [in preparation].
- Kelly, J.M. and Konstantinidis, D. "Steel Shim Stresses in Multilayer Bearings under Compression and Bending" *Journal of Mechanics of Materials and Structures*, 2009 [in review].
- Yang, T.Y. , Konstantinidis, D., and Kelly, J.M. "The Influence of Isolator Hysteresis on Equipment Performance in Seismic Isolated Buildings." *Earthquake Spectra* [in review].
- Kelly, J.M. and Konstantinidis, D. "The Effect of Friction on Unbonded Elastomeric Bearings." *Journal of Engineering Mechanics* (ASCE), 2009 [in press].
- Konstantinidis, D. and Makris, N. "Experimental and Analytical Studies on the Response of Freestanding Laboratory Equipment to Earthquake Shaking." *Earthquake Engineering and Structural Dynamics*, 2009 [in press].
- Konstantinidis, D. and Makris, N. "Seismic Response Analysis of Multidrum Classical Columns." *Earthquake Engineering and Structural Dynamics*. John Wiley & Sons. Volume 34: 10, pp. 1243-1270, 2005.
- Makris, N. and Konstantinidis, D. "The Rocking Spectrum and the Limitations of Practical Design Methodologies." *Earthquake Engineering and Structural Dynamics*. John Wiley & Sons. Volume 32: 2, pp. 265-289, 2003.

##### Reports

Kelly, J.M. and Konstantinidis, D. *Mechanics of Elastomeric Bearings*. Report No. PEER 2009/xx. Berkeley, California: Pacific Earthquake Engineering Research Center, University of California, 2009 [in preparation].

- Konstantinidis, D., Kelly, J.M. and Makris, N. *Seismic Response of Bridge Bearings*. Report No. EERC-2008/02, Earthquake Engineering Research Center, University of California, Berkeley, CA, 2007 [in press].
- Makris, N. and Konstantinidis, D., authors of Chapter 6 in: Comerio, M.C. (editor). *PEER Testbed Study on a Laboratory Building: Exercising Seismic Performance Assessment*. Report No. PEER 2005/12. Berkeley, California: Pacific Earthquake Engineering Research Center, University of California, 2005.
- Konstantinidis, D. and Makris, N. *Experimental and Analytical Studies on the Seismic Response of Freestanding and Anchored Laboratory Equipment*. Report No. PEER 2005/07, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA, 2005.
- Makris, N. and Konstantinidis, D. *The Rocking Spectrum and the Shortcomings of Design Guidelines*. Report No. PEER 2001/07, Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA, 2001.

### Conference Papers

- Konstantinidis, D. and Makris, N. "The Dynamics of a Rocking Block in Three Dimensions." *Proceedings of the 8th HSTAM (Hellenic Society for Theoretical and Applied Mechanics) International Congress on Mechanics*. Patras, Greece, July 12-14, 2007.
- Kelly, J.M. and Konstantinidis, D. "Low-Cost Seismic Isolators for Housing in Highly-Seismic Developing Countries." *Proceeding of the ASSISI 10th World Conference on Seismic Isolation, Energy Dissipation and Active Vibrations Control of Structures*. Istanbul, Turkey, May 28-31, 2007.
- Pinarbasi, S., Konstantinidis, D. and Kelly, J.M. "Seismic Isolation for Soft-Story Buildings." *Proceeding of the ASSISI 10th World Conference on Seismic Isolation, Energy Dissipation and Active Vibrations Control of Structures*. Istanbul, Turkey, May 28-31, 2007.
- Konstantinidis, D. and Makris, N. "Experimental and Analytical Studies on the Seismic Response of Freestanding and Restrained Laboratory Equipment." *Proceedings of the 100th Anniversary Earthquake Conference Commemorating the 1906 San Francisco Earthquake*. San Francisco, California, USA, April 18-22, 2006.
- Kelly, J.M. and Konstantinidis, D. "Seismic Response of Standard Thermal Expansion Bridge Bearings." *Proceedings of the 2005 Bridge Research Conference sponsored by Caltrans and CTF*. Sacramento, California, USA, October 31 - November 1, 2005.
- Konstantinidis, D. and Makris, N. "Seismic Response Analysis of Multidrum Classical Columns." *Proceedings of the 2005 Joint ASME/ASCE/SES Conference on Mechanics and Materials (McMat2005)*. Baton Rouge, Louisiana, USA, June 1-3, 2005.
- Konstantinidis, D. and Makris, N. "Earthquake Analysis of Multidrum Columns." *Proceedings of the Fifth International Conference on Earthquake Resistant Engineering Structures (ERES 2005)*. Skiathos, Greece, May 30 - June 1, 2005.
- Konstantinidis, D. and Makris, N. "Experimental and Analytical Results on the Seismic Response of Slender Laboratory Equipment." *Proceedings of the ATC-29-2 Seminar on Seismic Design, Performance, and Retrofit of Nonstructural Components in Critical Facilities*. Newport Beach, California, October 23-24, 2003.
- Makris, N. and Konstantinidis, D. "The Rocking Spectrum, Existing Design Guidelines, and a Scale Invariance." *Proceedings of the Fédération internationale du béton 2003 Symposium (FIB 2003)*. Athens, Greece, May 6-9, 2003.
- Makris, N. and Konstantinidis, D. "The Rocking Spectrum and the Limitations of Design Guidelines." *Proceedings of the 15th ASCE Engineering Mechanics Division Conference at Columbia University (EM 2002)*. New York, NY, June 2-5, 2002.
- Makris, N. and Konstantinidis, D. "The Rocking Spectrum and the Limitations of Design Guidelines." *Proceedings of the Third World Conference on Structural Control 2002 (3WCSC)*. Como, Italy, April 7-12, 2002. John Wiley and Sons Limited.