

Susan A. Brink

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Education

PhD Civil Engineering

- Expected May 2012, University of Delaware, Newark, DE.
- GPA: 3.96
- Specialization: Civil Infrastructure Systems
- Thesis topic: "Modeling the Interactions between Development and Regional Disaster Risk"

MS Civil Engineering

- May 2009, University of Delaware, Newark, DE.
- GPA: 3.97
- Specialization: Civil Infrastructure Systems
- Thesis topic: "Simulation of post earthquake water supply restoration: Calibration and application."

BS Mathematics

- May 2005, University of Florida, Gainesville, FL.
- GPA: 3.94
- Specialization: Pure Mathematics, Minor: Education

Publications

Peer-Reviewed Journal Articles

- Hill, A., Bevington, J., Davidson, R., Chang, S., Eguchi, R., Adams, A., **Brink, S.**, Panjwani, D., Mills, R., Pyatt, S., Honey, M. and Amyx, P. (in review). "Community-scale damage, disruption, and early recovery in the 2010 Haiti earthquake." *Earthquake Spectra*.
- Tabucchi, T., Davidson, R., and **Brink, S.** (2010). "Simulation of post-earthquake water supply system restoration." *Civil Engineering and Environmental Systems*, 27(4), 263-279.
- **Brink, S.**, Davidson, R. and Tabucchi, T. (2010). "Strategies to reduce durations of post-earthquake water service interruptions in Los Angeles." *Structure and Infrastructure Engineering*, First published on: 22 January 2010 (iFirst).

Conference Papers and Posters

- **Brink, S.** (2010). "Fundamental literature in risk analysis." *Proc., 2nd International Network on Risk, Crisis and Disaster Conference*, Östersund, Sweden.
- Bevington, J., Pyatt, S., Hill, A., Honey, M., Adams, B., Davidson, R., **Brink, S.**, Chang, S., Panjwani, D., Mills, R., Amyx, P. and Eguchi, R. (2010). "Uncovering community disruption using remote sensing: An assessment of early recovery in post-earthquake Haiti." *In: 8th International Workshop for Remote Sensing for*

Disaster Management, Yokohama, Japan.

- **Brink, S.** (2010). "Strategies to reduce durations of post-earthquake water service interruptions in Los Angeles." *In: 1st International Network on Risk, Crisis and Disaster conference*, Umeå, Sweden.
- **Brink, S.**, Davidson, R., and Tabucchi, T. (2009). "Estimated durations of post-earthquake water service interruptions in Los Angeles." *In: TCLEE2009: Lifeline Earthquake Engineering in a Multihazard Environment, Proceedings of the 2009 ASCE Conference*, ASCE, Oakland, CA. Reston, VA: ASCE, 1–12.
- Tabucchi, T., Davidson, R. and **Brink, S.** (2008). "Restoring the Los Angeles water supply system following an earthquake." *In: 14th World Conference on Earthquake Engineering, Beijing, China*.
- **Brink, S.** (2008). "Recovery of a Water System after an Earthquake." *Poster in: Delaware GIS 2008: A Spatial Network*, Dover, DE.

Other Publications

- Contributor to: Earthquake Engineering Research Institute (2010). "The Mw 7.0 Haiti Earthquake of January 12, 2010: Report #2."
- **Brink, S.** (2009). "Simulation of post earthquake water supply restoration: Calibration and application." MS Thesis, Department of Civil and Environmental Engineering, University of Delaware, Newark, DE.

Honors and Awards

- Global Research, Internships and Performances for Graduate Students Award, 2010
- National Science Foundation (NSF) Graduate Research Fellowship, 2009
- E.C. Davis Scholar Award, 2007
- Anderson Scholar, 2005
- Florida Bright Futures Scholarship, 1999

Professional Experience

2007 – Present

Department of Civil Engineering, University of Delaware, Newark, DE

NSF Graduate Fellow

- Developing model to show the interactions between disasters and development
- Conducted recovery fieldwork in Port-au-Prince (May 2010)
- Member of Earthquake Engineering Research Institute (EERI) Learning from Earthquakes Haiti reconnaissance team (February 2010)

Research Assistant

- Calibrated a simulation model of post-earthquake water restoration using historical data
- Evaluated restoration strategies and total seismic risk to the water system in Los Angeles

- Developed a GIS toolbar to visualize model output
- Provided technical and research support to colleagues at Cornell University

2006-2007

Suk Cheon Elementary School, Bucheon, South Korea

English as a Second Language (ESL) Teacher

- Taught formal and conversational English to approximately 150 Korean ESL students
- Co-managed the afterschool English program
- Led parents class to develop home English instruction

2003-2005

Peace Corps / Tosamaganga Secondary School, Tosamaganga, Tanzania

Mathematics Teacher

- Taught advanced level mathematics to 250-350 students
- Founded and managed the debate club
- Supervised the school soccer team
- Taught night classes in basic computer skills to approximately 150 students
- Participated in an on call rotation for administrative duties to manage the school operations
- Managed a class of 30 boarding school students in a counseling and administrative role.

2002-2003

Broward Tutoring Center, Gainesville, FL

Mathematics Tutor

- Managed a class of 30 boarding school students in a counseling and administrative role. Tutored university students in mathematics
- Focused on Calculus I-III, Differential Equations and Linear and Abstract Algebra
- Prepared students for exams

Professional Memberships

- Earthquake Engineering Research Institute (EERI), February 2010-present
- Society for Risk Analysis (SRA), February 2010-present
- American Society for Civil Engineers (ASCE), March 2010-present
- Women in Engineering Steering Committee, July 2009-present, Historian October 2010-present
- Graduate student member of Disaster Research Center, April 2008-present
- International Network on Risk, Crisis and Disaster, March 2010-present