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a. Professional Preparation

Arizona State University	Geological Sciences	Ph.D coursework 2006-07
Arizona State University	Geological Sciences	M.S., 2006
Whitman College (<i>Honors in Major Study</i>)	Geology	B.A., 2000

b. Appointments

2009 - Project Manager, OpenTopography Facility, San Diego Supercomputer Center, University of California, San Diego.

2008 - 2009 Geoscience Coordinator, GEON Project, San Diego Supercomputer Center, University of California, San Diego.

2004 - 2009 Project Manager, GEON LiDAR Workflow, Arizona State University & San Diego Supercomputer Center (SDSC), University of California, San Diego.

2000 - 2003 Intern/Research Assistant, Western Earthquake Hazards Team, U.S. Geological Survey, Menlo Park

c. Relevant Publications

1. **Crosby, C.J.**, *in review*, Lidar and Google Earth: Simplifying Access to High-Resolution Topography Data, Geological Society of America Special Paper on Google Earth in Earth Science Research and Education.
2. Krishnan, S., **Crosby, C.J.**, Nandigam, V., Phan, P., Cowart, C., Baru, C., and Arrowsmith, J R., 2011, OpenTopography: a services oriented architecture for community access to LIDAR topography: In Proceedings of the 2nd International Conference on Computing for Geospatial Research & Applications (COM.Geo '11), AMC, 8 p. DOI=10.1145/1999320.1999327
3. **Crosby, C.J.**, Arrowsmith, J R., Nandigam, V., Baru, C., 2011, A Geoinformatics Approach To Online Access And Processing Of LIDAR Topography Data, *in*, Geoinformatics, R. Keller and C. Baru, eds., Cambridge University Press, London.
4. Krishnan, S., Baru, C., **Crosby, C.J.**, 2010, Evaluation of MapReduce for Gridding LIDAR Data, Proceedings of 2nd IEEE International Conference on Cloud Computing Technology and Science, pp. 33-40.
5. Prentice, C.S., **C.J. Crosby**, C.S. Whitehill, J R. Arrowsmith, K.P. Furlong, D.A. Phillips, 17 February 2009, Illuminating Northern California's Active Faults, *Eos*, Vol. 90, No. 7, p. 55-56.

Other Publications

1. Altinas, I., Crawl, D., **Crosby, C.J.**, 2011, Scientific Workflows for the Geosciences: An Emerging Approach to Building Integrated Data Analysis Systems, *in*, Geoinformatics, R. Keller and C. Baru, Eds., Cambridge University Press, London.
2. Nandigam, V, Baru, C., and **Crosby, C.J.**, Database Design for High-Resolution LIDAR Topography Data, *in*, M. Gertz and B. Ludascher (Eds.): SSDBM 2010, Lecture Notes in Computer Science 6187, pp. 151–159, 2010
3. Prentice, C.S., Weber, J.C., **Crosby, C.J.**, Ragona, D., 2010, Prehistoric earthquakes on the Caribbean–South American plate boundary, Central Range fault, Trinidad, *Geology*; August 2010; v. 38; no. 8; p. 675-678; DOI: 10.1130/G30927.1
4. Toke, N.A., JR. Arrowsmith, J.J. Young, **C.J. Crosby**, 2006, Paleoseismic and postseismic observations of fault slip along the Parkfield segment of the San Andreas Fault, Bulletin of

Seismological Society of America **96**, 221–238.

5. Jaeger-Frank, E., **C.J. Crosby**, A. Memon, V. Nandigam, J.R. Arrowsmith, J. Conner, I. Altintas, C. Baru, A Three Tier Architecture for LiDAR Interpolation and Analysis, Lecture Notes in Computer Science, 3993, Apr 2006, Pages 920-927, DOI 10.1007/11758532_123.

d. Synergistic Activities

1. Project manager for the OpenTopography Facility and its predecessor the GEON LiDAR Workflow, an internet-based system to provide access to high-resolution lidar topographic data and online processing tools. Guide the development of internet-based tools to deliver lidar topography data in a variety of formats including: Google Earth KML, digital elevation model, and point cloud. Provide help desk support and informal education to guide users in accessing and working with lidar data products. Act as project advocate, representing OpenTopography at scientific conferences, workshops, and through social media.
2. Consult with science community members seeking to acquire research grade lidar data, and provide QA/QC oversight for data products before they are released to the public.
3. Instructor for short courses (GSA (2007 & 2009), UNAVCO (2008), SCEC and OpenTopography sponsored (2009 & 2011)) focused on the utilization of lidar topography for earth science research. Developed lectures, tutorials, and sample data products that can be used by the lidar user community to enhance their understanding of lidar technology, data, and analysis techniques.
4. Instructor (2007-2010) and co-organizer (2009 - 2011) of the Cyberinfrastructure Summer Institute for Geoscientists (CSIG) at SDSC. Presented lectures on the GEON and OpenTopography lidar processing systems, high-resolution topographic data, and how information technology tools can be applied to the distribution and processing of massive geospatial datasets.

e. Collaborators and Other Affiliations

Collaborators:

Ilkay Altintas, SDSC, UCSD; J Ramon Arrowsmith, Arizona State; Luke Blair, U.S. Geological Survey; Matt Fouch, ASU; David Harding, NASA GSFC; Randy Keller, U. Oklahoma; Siri Jodha Khalsa, NSIDC; Ian Madin, DOGAMI; Chuck Meertens, UNAVCO; Dave Nadeau, SDSC, UCSD, Michael Oskin, UC Davis; David Phillips, UNAVCO; Carol Prentice, U.S. Geological Survey; Nancy Wilkins-Diehr, SDSC.

Theses & Advisors:

B.A. Honors Thesis: Reassessment of the 1906 earthquake and paleoseismology of the San Andreas fault, Doda Ranch, Northern California: Whitman College. Advisors: Dr. Carol Prentice, U.S. Geological Survey, Menlo Park & Dr. Kevin Pogue, Whitman College.

M.S.: A Geoinformatics Approach to LiDAR Data Distribution and Processing with Applications to Geomorphology: Arizona State University. Advisor: Dr. J Ramon Arrowsmith