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Education

- 1976 B.S., Engineering and Applied Science, California Institute of Technology
- 1979 M.S., Engineering, University of California at Los Angeles
- 1984 Ph.D., Electrical Engineering, Stanford University

Appointments

- 2006- Professor, Departments of Geophysics and Electrical Engineering (joint appt.), Stanford University, Stanford, CA.
- 1995-2006 Associate Professor, Departments of Geophysics and Electrical Engineering (joint appt.), Stanford University, Stanford, CA.
- 1984-1995: Assistant Manager, Radar Science and Engineering Section, NASA Jet Propulsion Laboratory, Pasadena, CA.
- 1984: Post-doctoral Research Affiliate, Stanford University, Stanford CA.
- 1976-1980: NASA Jet Propulsion Laboratory, Radar Sci. and Eng. Section.
- 1975-1976: NASA Jet Propulsion Laboratory, Physics Section.

Honors And Awards

- 1999 Fellow, IEEE
- 1999 Robert Noyce Faculty Scholar Chair, Stanford University School of Eng.
- 1998 Dana Adams Griffin Award, School of Engineering, Stanford University
- 1995 Best paper, IEEE Geoscience and Remote Sensing Society (IGARSS 95)
- 1990 U.S. Patent No. 4,975,704: Method for Detecting Surface Motions and Mapping Small Terrestrial or Planetary Surface Deformations with SAR
- 1990 NASA Group Achievement Award, Airborne Imaging Radar System Team
- 1989 U.S. Patent No. 4,829,303: Data Volume Reduction for Imaging Radar Polarimetry
- 1988 Jet Propulsion Laboratory Director's Research Achievement Award
- 1988 Best paper award, IEEE Geoscience and Remote Sensing Society
- 1984 U.S. Patent No. 4,450,447: Synthetic Aperture Radar Target Simulator
- 1982 NASA Group Achievement Award, Shuttle Radar (SIR-A) Devel. Team
- 1979 NASA Group Achievement Award, Seasat-A Synth. Aperture Radar Team
- 1984-1995: Multiple NASA Certificates of Achievement for New Technology

Recent Relevant Publications (5)

- Oveisgharan, S., and H. A. Zebker, Estimating snow accumulation from InSAR correlation observations, submitted to IEEE Trans. Geosci. Rem. Sensing, 2005.
- Zebker, H. and K. Chen, Accurate Estimation of Correlation in InSAR Observations, IEEE Geoscience and Remote Sensing Letters, Volume 2, Issue 2, pp. 124 – 127, Apr. 2005.
- Amelung, F.; Jonsson, S.; Zebker, H.A.; Segall, P., Widespread uplift and 'trapdoor' faulting on Galapagos volcanoes observed with radar interferometry, Nature, Vol.407, No.6807, p.993-6, 26 Oct. 2000;

- Hoen, E.; Zebker, H.A., Penetration depths inferred from interferometric volume decorrelation observed over the Greenland Ice Sheet, IEEE Transactions on Geoscience and Remote Sensing, Vol.38, No.6, p.2571-83, Nov. 2000.
- Zebker, H.A., P.A. Rosen, R.M. Goldstein, A. Gabriel, and C. Werner, On the derivation of coseismic displacement fields using differential radar interferometry: the Landers earthquake, JGR-Solid Earth, Vol. 99, No. B10, pp 19617-19634, October 10, 1994.

Other Significant Publications

- Zebker, H. A., and R. M. Goldstein, Topographic Mapping Derived from Synthetic Aperture Radar Measurements, J. Geophys. Res. 91, 4993-9, 1986.
- Zebker, H.A., and J. Villasenor, Decorrelation in interferometric radar echoes, IEEE Trans. Geo. Rem. Sensing, Vol 30, no. 5, pp 950-959, September, 1992.
- Zebker, H.A., P.A. Rosen, S. Hensley, and P. Mouginis-Mark, Analysis of active lava flows on Kilauea volcano, Hawaii, using SIR-C radar correlation measurements, Geology, Vol. 24, No. 6, pp. 495-498, 1996.
- Chen, C.W.; Zebker, H.A., Two -dimensional phase unwrapping with use of statistical models for cost functions in nonlinear optimization, Journal of the Optical Society of America A, Vol.18, No.2, p.338-51, Feb. 2001.
- Hoffmann, J., Zebker, H. A., Galloway, D. L., and Amelung, F., Seasonal subsidence and rebound in Las Vegas Valley, Nevada observed by synthetic aperture radar interferometry, Water Resources Research, Vol. 37 , No. 6 , p. 1551, June 2001.

Synergistic Activities

- Associate Editor, IEEE Transactions on Geoscience and Remote Sensing, 1997-
Chair, Western North America InSAR Consortium (WInSAR), 1999-
Editor, InSAR Working Group, 2004-
NASA Antarctic Mapping Mission (AMM) Science Advisory Group, 2001-
Technical Program Committee, Progress In Electromagnetic Research Symposium, 2000-
Steering Committee and Earthquake Working Group Chair, NSF Workshop on Scientific Applications of Synthetic Aperture Radar, USC, June 28-30, 2000.
Earth Science Technology Office, NASA, Advanced Radar Technology Panel, 2000.
International Scientific Committee, 8th International Symposium on Physical Measurements and Signatures in Remote Sensing, ISPRS, 2000-

Collaborators And Other Affiliations

- Recent collaborators and co-editors: F. Amelung (U. Miami), J. Bell (U. Nevada Reno), P. Cervelli (USGS/HVO), C. Chen (JPL), D. Galloway (USGS), R. Hanssen (TU Delft), E. Hoen (MIT/LL), J. Hoffmann (Stanford U.), S. Jonsson (Harvard U.), R. Laczniaik (USGS), P. Mouginis-Mark (U. Hawaii), S. Rowland (U. Hawaii), P Segall (Stanford U.), T. Weckwerth (NCAR),
- Supervision of Ph.D. Candidates and Post-doctoral scholars: Leif Harcke, SRI International, Arlen Schmidt, Intermap; Curtis Chen, Caltech Jet Propulsion Laboratory (NASA); Takuya Ishikawa, East Japan Railway Company; Weber Hoen, MIT Lincoln Laboratory; Sigurjon Jonsson, ETU (Zurich) University; Joern Hoffmann, German Space Agency DLR, Ramon Hanssen, Technical University of Delft; Falk Amelung, U. of Miami; Margaret Gelautz, Technical University of Graz (Austria); 9 current Ph.D. students.