

# Curriculum Vitae

---

## Quinn Hart

Department of Land, Air and Water Resources  
University of California, Davis, CA 95616-8527  
Phone: (530) 752-7857 Fax: (530) 754-5491  
qjhart@ucdavis.edu  
<http://qjh.gforge.casil.ucdavis.edu>

### Education

- 2006** University of California, Davis. Doctor of Philosophy awarded in Computer Science.  
**1990** University of Arizona. Master's of Science degree awarded in Optical Sciences.  
**1987** University of Arizona. Bachelor of Science degree awarded in Engineering Mathematics.

### Professional Experience

- 1992–present** Department of Land, Air and Water Resources, University of California, Davis.  
Programmer.  
**1990–1992** Scitec, Princeton, NJ. Scientist.

### Selected Publications

**Five selected publications** Q. J. Hart, M. Brugnach, B. Temesgen, C. Rueda, S. L. Ustin, and K. Frame. Daily reference evapotranspiration for california using satellite imagery and weather station measurement interpolation. *Civil Engineering and Environmental Systems*, 26(1):19–33, March 2009.

N Parker, P Tittmann, Q Hart, B Jenkins, R Nelson and A Milbrandt, A Schmidt, G Gordon, and E Gray. Development of a biorefinery optimized biofuel supply curve for the western united states. In *Proceedings of the 16th European Biomass Conference*, Valencia, Spain, June 2008.

Jianting Zhang, Quinn Hart, Michael Gertz, Carlos Rueda, and Jeffrey Bergamini. Sensor data dissemination systems using web-based standards: a case study of publishing data in support of evapotranspiration models in california. *Civil Engineering and Environmental Systems*, 26(1):35–52, March 2009.

Q.J. Hart and M. Gertz. Optimization of multiple continuous queries over streaming satellite data. In *GIS '06: Proceedings of the 14th annual ACM international symposium on Advances in geographic information systems*, pages 243–250, New York, NY, USA, 2006. ACM Press.

Q.J. Hart and M. Gertz. Querying streaming geospatial image data: The GeoStreams project. In James Frew, editor, *SSDBM*, International Conference on Scientific and Statistical Database Management, pages 147–150. University of California, Santa Barbara, CA, June 2005.

**Additional publications** P Tittmann, N Parker, Q Hart, and B Jenkins. A spatially explicit techno-economic model of bioenergy and biofuels production in California. *Journal of Transport Geography*, 2009. In review.

Q.J. Hart. *GeoStreams: An Online Geospatial Image Database*. PhD thesis, University of California, Davis, December 2006.

Q.J. Hart, M. Brugnach, and S.L. Ustin. Calculation of daily reference evapotranspiration for California using GOES satellite measurements and CIMIS weather station interpolation. *Technical Report*, California Department of Water Resources, 2005.

Q.J. Hart. Building a digital library/metadata catalog for environmental modeling for California. In *Climate Change Symposium - Challenges and Solutions for California Agricultural Landscapes*. University of California, Davis, 2005.

## Synergistic Activities

I have combined experience in remote sensing and spatial databases with research in methods to provide access to image data and derived products, and to integrate these data with other spatial information.

I am the technical architect of the California Spatial Information Library (CaSIL), and I conduct research into novel access methods to distributed information management.

I develop infrastructure to support collaborative environments for data discovery, distribution, exchange and use that supports cross-disciplinary studies on landscape ecology, environmental change detection, environmental decision making, weather systems, and climate change.

## Collaborators

John Ellison, California Resources Agency; Kent Frame, Department of Water Resources; Dr. Michael Gertz, (UC Davis); Dr. Bryan Jenkins (UC Davis); Dr. Bertram Ludæscher (UC Davis); Dr. Susan Ustin, (UC Davis);

## Reviews and Panels

**2006** Reviewer, Computers and Electronics in Agriculture.

**2006** Reviewer, Agricultural and Forest Meteorology.

**2005** Reviewer, IEEE Transactions on Knowledge and Data Engineering (TKDE), Special Issue on the Semantic Web.

**2004** NSF Proposal Review Panel, Division of Information and Intelligent Systems (IIS), Information & Data Management (IDM) Program.

## Theis Advisor

Dr. Michael Gertz, Department of Computer Science, University of California, Davis.

March 4, 2009