Andrew F. Hart

NASA Jet Propulsion Laboratory **Pasadena, CA**

Email: ahart@apache.org **Phone:** available on request **Web:** people.apache.org/∼ahart

Education

M.S., Computer Science University of Southern California, May 2007 GPA: 3.81/4.0

- *Emphasis in Software Engineering*

B.S., Computer Science University of Southern California, May 2005 GPA: 3.17/4.0

- *Minor in Multimedia and Creative Technologies*

Technical Experience

- Software Engineer III NASA Jet Propulsion Laboratory 9/2012 to Present
  - Used Python to develop a near-real-time data collection and analysis framework for a network of distributed weather stations. Provided a web-based interface for ad-hoc exploration, visualization, and subsetting of the data. Developed a RESTful data access API for flexible third party access. [Python, MongoDB, Node.js, JavaScript (inc. JQuery), HTML, CSS]
- Software Engineer II NASA Jet Propulsion Laboratory 9/2009 to 8/2012
  - Co-developed a scalable parametric database for regional climate model evaluation. Utilized Apache Hadoop + OODT to bring together decades of NASA observational climate datasets. [Apache OODT, Hadoop, HIVE, PHP, Python, Java]
  - Lead front-end developer for a multi-mission, reusable data management pipeline for airborne missions. Responsible for a team of three developers designing web-based interfaces to workflow and data archive systems. [Apache OODT, PHP, Java, Javascript (inc. JQuery)]
- Software Engineer I NASA Jet Propulsion Laboratory 4/2007 to 8/2009
  - Developed an AJAX-enhanced user interface for searching and visualizing cancer specimen image data "geographically" on the human body. Recognized with a JPL SPOT award for this interface in 2008. [PHP, HTML, Javascript, CSS]
  - Designed and implemented a data model and web application for curation of cancer biomarker research information. Continued active daily use by researchers in the National Cancer Institute's Early Detection Research Network. [PHP, MySQL, HTML, Javascript (inc. MooTools)]
- Graduate Research Assistantship USC Information Sciences Institute 5/2006 to 5/2007
  Extended the open source LinuxBIOS project to implement mutual assurance checks at the BIOS level between a network controller and client nodes. [C, Assembly]
- Undergraduate Summer Research Southern California Earthquake Center 5/2004 to 8/2005
  Team development of Java-based, interactive 3D visualization software for earthquake science research. Was asked to continue through graduation the following year. [Java, Java3D]
- Development Engineering Internship IMPAC Medical Systems 5/2003 to 9/2003
  Four-month internship with supervised design and implementation of software to ensure database compliance with HIPAA privacy guidelines. [Clarion, SQL]

Publications

- First author of several peer-reviewed conference and journal papers. An exhaustive list of publications and presentations is available at www.andrewfhart.com/publications.
- Co-author of a chapter in *Handbook of Data Intensive Computing*, B. Furht, A. Escalante, eds. 1st Edition. Springer Verlag, 2011.

Extracurricular and Miscellaneous

- Dual citizen of United States and Canada
- Elected a member of the Apache Software Foundation 6/2012
- Committer and Member of Project Management Committee, Apache OODT 1/2010 to Present
- Additional information, including online portfolio: www.andrewfhart.com