

James “Augie” Hill

San Francisco, CA · 214-562-3593 · augie@augiehill.com · augiehill.com

Education

- University of Michigan:** Ann Arbor, MI September, 2010 - April, 2012
M.S.E., Computer Science (Intelligent Systems) GPA: 7.639 / 9.0 (A = 8)
Research: Strategic Reasoning (Computational Economics)
- Southern Methodist University:** Dallas, TX August, 2003 - December, 2006
B.S., Computer Engineering (Software); Minor, Mathematics GPA: 3.68 / 4.0 (A = 4)
Continued ice dance training and competition through January, 2006.

Experience

- Google:** Mountain View, CA May, 2014 – Present
Business Analyst
- Google Express (A.K.A. Google Shopping Express)
 - Define and track project objective metrics
 - Design, implement, and maintain sales and revenue reporting pipelines and visualizations
 - Design, implement, and maintain front-end usage reporting pipelines and visualizations
 - Gather data warehouse requirements and prioritize additional data gathering and processing
 - Feature design analysis and recommendation
- Google, Google Technical Services (gTech):** Mountain View, CA July, 2012 – May, 2014
Technical Solutions Consultant
- Google Express (A.K.A. Google Shopping Express)
 - Design, implement, and maintain inventory reporting pipelines and visualizations
 - Design processes and implement tools to support product data quality improvements
 - Design requirements and prioritize projects towards improving product data
 - Identify opportunities and manage design of improvements to the inventory prediction system
 - Google Shopping: global per-merchant click and cost forecasting; ad hoc analysis for sales vertical
- Google, PSO, Business Intelligence:** Mountain View, CA May, 2011 - August, 2011
Associate Technology Manager Intern
- Helped to develop a tool named Inventory Planner, which aggregates and analyzes traffic and revenue data by domain, the primary purpose of which is to support the Sales team's objective of partner and advertiser lead generation and upsell. Given a set of domains labeled by the Sales team according to a new taxonomy, designed and partially developed a method of automatically applying those labels to all domains.
- University of Michigan, Proteome Research Lab:** Ann Arbor, MI February, 2007 - October, 2010
Applications Programmer, Intermediate
- Worked in a very small group to develop tools for use by the global proteomics community. The objective of the team was to aid in the storage and dissemination of scientific data amongst researchers. The primary software package is Tranche, a free and open source file storage and dissemination system that is decentralized, scalable, secure, and accountable. A secondary software package is a science community web site that provides a web portal to the Tranche repository for proteomics researchers.
- Tasks:
- Develop, test, and document the Tranche Distributed Repository and Proteome Commons
 - Maintain a network of web and storage servers for the Proteome Commons Tranche Repository
 - Develop a comprehensive Java Swing user interface for interaction with a Tranche Repository
 - Contribute to the grant proposal processes
- Major accomplishments:
- Developed a set of Java Swing-based graphical user interfaces for the Tranche repository.
 - Created a software module and additional code in the Proteome Commons IO-Framework that interfaces with the Tranche repository to reformat FASTA files.
 - Made the repository code generic and easily configurable, making the code more reusable.
 - Developed batch methods for sending and receiving many small transactions to improve performance.
 - Set up and maintained an Apple XServe web server running Tomcat, SSL, SVN, and MySQL for use by multiple web sites developed by the labs.
 - Recreated Proteome Commons as a “science community” using principles of Web 2.0 social networking with

- Tranche as the data-sharing backbone.
- Lead the design and creation of the Tranche Annotations and its integration into Proteome Commons.
- Integrated the Proteome Commons Tranche Annotations database into the Cancer Biomedical Informatics Grid (caBIG) to allow for increased exposure of data sets stored on the Proteome Commons Tranche Distributed Repository.

Freelance Developer

January, 2003 – Present

Develop web, software, and hardware applications for fun, money, and education. A portfolio is on augiehill.com.

Skills

Data	SQL; Pipeline Design, Implementation, and Maintenance; Data Visualization; Schema Modeling; Data Warehouse Requirements; Database Optimization; Semantic Interoperability
Analysis	Metric Design, Forecasting, Machine Learning, Game Theory, Mechanism Design, MatLab, Weka
Programming	Languages: Java, Python, C++, C; Distributed Systems, Web Server Design
Web	HTML, CSS, JavaScript, JSP, PHP, Ajax, HTTP; Apache Tomcat, Django
Network	DNS Management, TCP/IP Network Programming, SSL management
Software	Excel; Docs; Preso; UNIX: Ubuntu, Mac; Windows; Netbeans IDE; Subversion; Git; Perforce; LaTeX
Hardware	Server/Desktop/Laptop specification, assembly and maintenance; Arduino; Circuit Design

Publications

James A. Hill and Michael P. Wellman. Peer-to-Peer Tangible Goods Rental. In Proceedings of the *AAMAS Joint International Workshop on Trading Agent Design and Analysis / Agent-Mediated Electronic Commerce (TADA/AMEC)*, Valencia (2012), 47-60.

Hill, James A.; Smith, Bryan E.; Papoulias, Panagiotis G.; Andrews, Philip C. ProteomeCommons.org Collaborative Annotation and Project Management Resource Integrated With the Tranche Repository. *Journal of Proteome Research*. 2010, 9(6), 2809-2811.

Smith, Bryan; Hill, James; Gjukich, Mark; Andrews, Philip. Tranche Distributed Repository and ProteomeCommons.org. Chapter from *Data Mining in Proteomics: Methods in Molecular Biology*. Humana Press, 2010.

Falkner, Jayson A.; Hill, James A.; Andrews, Philip C. Proteomics FASTA Archive and Reference Resource. *Proteomics*. 2008, 8(9), 1756-1757.

Other Interests

Competitive Ice Dancer

1997-2006, 2007-2008

9-time international competitor, 10-time national competitor, 3-time national medalist
Year-round training regimen consisted of between 15 and 40 hours per week