

Steve Crampton

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Summary

Constantly on the search for new things to learn and new challenges. Things I love:

- distributed computing systems
- machine learning and statistics
- collegial work environment

Work Experience

Senior Software Engineer, 2014–present

blab, Seattle, WA

- Delivered backend components for a new system using MySQL and MongoDB to manage user accounts and vend machine-generated targeting segments for online advertising.
 - As part of a 4-person team of senior engineers, designed and built the mission-critical system from backend through UI and delivered it on the original due date
 - Also designed and implemented an automatic term splitter that uses statistical techniques to split composite words, e.g., "thisisgreat" -> "this is great"
- Designed and built a sandbox for testing predictions and prediction algorithms
 - Designed, prototyped, and benchmarked alternative architectural proposals
 - Delivered system to meet business requirements and also added a UI dashboard so that stakeholders can observe relevant prediction metrics in easy-to-understand graphs and visualizations
- Re-architected machine-learning system to achieve greater efficiency and scale to meet strategic business goals
- Interview job candidates, participate in planning meetings, and otherwise assist in the operation of a lean startup

Software Development Engineer II, 2010–14

Amazon.com, Seattle, WA

- Designed and delivered a robust and scalable internal service to handle asynchronous requests, including automated testing and deployment procedures
- Designed and built a tool to suggest keywords based on Bayesian statistical inference, which out-performed manually generated keywords
- Designed and implemented portions of a new system to generate and manage social-media ads
 - Drafted and presented design documentations and data schemas
 - Wrote and tested distributed workflows using SWF and EMR
 - Integrated with Facebook API, DynamoDB, Oracle DBs, and Amazon systems
- Designed and ran ETL jobs and SQL queries on large databases to obtain relevant, actionable information for decision-makers
- Designed and built components of a highly scalable system that was a drop-in replacement for a business-critical legacy system on time for Q4
- Scrum Master for team divided between the U.S. and India
- Wrote Hive jobs for and maintained an internal Hadoop cluster to perform view-through attribution for offsite-display ads
- Designed and implemented system expansions of the Amazon Associates Program to new marketplaces with different languages and currencies
- As an appointed member of the Engineering Excellence Group, organized workshops to improve our software-development process

Computer Science Instructor, 2010

ITT Technical Institute, Jacksonville, FL

- Taught Introduction to the Linux Operating System and Linux System Administration

Independent Software Developer, 2009

U.S. Geological Survey, Hawaii National Park, HI

- Designed and built a computer-vision system to track multiple objects (bats) and provide a user interface for analysis

Technology and Math Teacher, 2008–10

Kirby-Smith Middle School, Jacksonville, FL

- Taught technology and math classes in a math-and-science magnet school
- Secured funding for, built, and operated a thin-client computer lab with open-source software

Computer Science and Technology Teacher, 2004–08

Dwight-Englewood School, Englewood, NJ

- Designed and taught AP Computer Science and other technology courses
- Advised student projects on generating functions, chatterbots, computational fluid dynamics, and 3D animation

Computer Science Lecturer, 2000–04

Boston University, Boston, MA

- Taught Introduction to Computers to sections as large as 120 students
- Supervised teaching fellows and graders

Education

M.A. in Computer Science, 2004

Ph.D. Student, 2000-04

Boston University, Boston, MA

- **Chancellor's Award**, Boston University's Science and Technology Day 2003
- **Coursework:** computer vision, computer graphics, networks, complexity, algorithms, systems, languages, algebra, multivariable calculus, probability, statistics, stochastic processes, logic, and discrete mathematics
- Published in the fields of human-computer interaction and computer vision
- In addition to work as a Lecturer, served as a Teaching Fellow and Research Fellow

Links

- <http://www.stevec.org/phd-research.html>
- <http://www.stevec.org/computer-projects.html>

Random Trivia

- First career was as an attorney: member, U.S. Supreme Court Bar; member, George Washington Law Review; winner, Moot Court Competition (judged by future Supreme Court Justice Ruth Bader Ginsberg)
- Licensed towboat captain, SeaTow Boston

Online version at <http://www.stevec.org/resume.html>