### Joan Smith

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### **EDUCATION**

# **Massachusetts Institute of Technology**

Graduated 6/2013

B.Sc. in Physics.

Coursework included Theory of Computation, Structure and Interpretation of Computer Programs, Performance Engineering of Software Systems, and Quantum Physics.

#### **EXPERIENCE**

### Twitter, Cambridge, MA

05/2014 - present

Software Engineer II, Fabric (mobile developer tools)

Instrumental member of an agile team developing Beta, a product to help mobile developers release beta distributions of their applications. Scaled the product from launch to one million app releases. Conceived and executed a Node.js project to improve the development/test environment for ~50 server engineers by implementing and socializing a tool to orchestrate Docker containers for local development. Ran Girls Who Code club and summer program at Twitter Boston. Women in Engineering site lead.

### Oracle, Burlington, MA

09/2012 - 05/2014

Software Developer II, Scalability for Solaris Servers

Reduced OS scalability issues by developing solutions to minimize lock contention, lower memory bus usage, decrease cache miss rates, and increase algorithmic performance.

Dual focus on improving existing scaling issues and running experiments on large systems to identify new development targets.

Personal emphasis on cache aware algorithms, kernel memory allocations, boot time, and trap handling.

### **MIT Institute for Cancer Research**

01/2012 - present

Bioinformatics Data Analysis, Laboratory of Angelika Amon

Designed and implemented a system for analyzing publicly available cancer microarray and patient data to produce a signature of cancer subtypes that are associated with disease progression.

(Paper: http://cancerres.aacrjournals.org/content/73/21/6401.short)

Implemented genome-wide statistical testing to analyze gene expression changes associated with chromosome abnormalities. (Paper: <a href="http://www.pnas.org/content/early/2012/07/10/1209227109">http://www.pnas.org/content/early/2012/07/10/1209227109</a>)

# Accenture, Boston, MA

Summer 2011

Consulting Analyst, Infrastructure Security, Product Offerings and Development

Designed and implemented improvements and add-ons to existing enterprise security software, with a future patent possible. Managed developers for the design and development of additional security offerings.

# Apple, Inc., Cupertino, CA

Summers 2009 and 2010

Software Engineering Intern, iOS Sync Services and Mac OS X Product Release

Designed, optimized and implemented full-text search in the body of email messages for iOS devices. Wrote code in Objective-C using Cocoa.

Developed an Apple internal web tool to network boot remote machines into an OS build with a preinstalled third party app. Triaged binary compatibility bugs using regression testing.

#### <u>SKILLS</u>

Expertise in: Ruby on Rails, C, Python, Clojure, Node.js, React, Objective-C, MySQL, BASH, Java, SPARC assembly Experience with: R, x86 assembly, C++, Unit testing frameworks Code and writing samples available: http://joans.io

### **PAPERS AND TALKS**

Upcoming: Twitter Flight, 10/2015

Sheltzer, J.M. and **Smith, J.C.** (2014). <u>Elite male faculty in the life sciences employ fewer women.</u> PNAS 111, 10107–10112. Press: <u>Slate, Time, Washington Post, Boston Globe</u>