James Mullowney

jamesmullowney.com

Accomplished software engineer with 20+ years of experience designing large-scale systems in cloud, storage, and language technologies. Expert in Java, distributed architectures, and algorithmic problem-solving. Recently focused on developing original libraries in computational number theory and geometric modeling (ConcreteNumbers, Rosettes). Eager to rejoin an engineering team with deep technical challenges.

Work Experience

3/2021 - 3/2022

Software Development Engineer, Amazon Inc.

Denver, CO/Remote

- Joined the Installments team at Amazon as a full stack engineer. Worked on internal tools, customer-facing user interfaces and back end services.
- Worked on a project to extend installments offerings to third party sellers in the Amazon marketplace.
- Collaborated with external teams on Installments integration points with Amazon Web Services and the retail web site.
- Provided 24/7 operational support during on call shifts. Managed deployments and horizontal scaling of backend services during peak periods.

10/2019 - 10/2020

Senior Software Engineer, Oracle Corp. - OCI

Remote

- Joined the Blockstorage group within Oracle Cloud Infrastructure as a fully remote team member to work on the automation of operational tasks.
- Created software applications based on micro-service architectures, utilizing cloud computing software patterns and principles.
- Implemented a process for hardware repair automation in customer-serving data center hosts. Collaborated with multiple teams to integrate with external services.
- Designed and implemented a solution for automating the security patching of data center hosts. The system automates the detection of new Linux kernels made available by the security team and integrates with OCI's Shepherd deployment tool to automate kernel patching in a several week long process.
- Provided 24/7 on call support for data center operations and application deployment.

3/2014 - 10/2019

Senior Software Engineer, Oracle Corp.

Broomfield, CO

- Joined the Pillar team to work on the FS1 next generation SAN storage appliance. Converted a legacy codebase to modern RESTful APIs.
- Worked closely with OCI BlockStorage team to integrate the FS1 into OCI as their tiered storage solution.
- Designed and implemented RESTful APIs for Oracle's FS storage management software using Java 8, JSR and the Jersey Framework
- Created a regression testing framework based on TestNG and Jersey. Managed continuous integration test systems with Jenkins.

2/2010 - 3/2014

Software Engineer, Rosetta Stone, Inc.

Boulder, CO

- Joined the Speech Research Lab of Rosetta Stone to build in-house tools, prototype new products and provide expertise in Java application development. Quickly integrated with the speech team by learning new technologies and mentoring less experienced developers.
- Created a Java-based automated testing tool for the Rosetta Stone Speech Recognition Engine (SRE). Implemented as a Java Swing front end delivered via Tomcat and Java Web Start. Integrated with Hudson/Jenkins for continuous integration and automated building.
- Worked on Rosetta Reader, a rails-based language-learning application for "reading the web". Application acts as both language-learning platform and content delivery tool by "scrubbing" arbitrary web pages for clean ad-free learning experience.
 Developed rich web clients based on Javascript (jQuery), HTML 5 and Flex for highly interactive, real-time visual reading tracking.

6/2004 - 6/2009

Software Engineer, Interactions Corporation

Carmel, IN

- Joined the young telecom startup as its eighth employee to build out the Interactions core architecture. Evolved with the company as it implemented process and quality improvements and grew to 50+ employees.
- Designed and implemented a novel solution for concatenative text-to-speech which was later referred to as "the best in its class" by the CEO.
- Developed a complete end-to-end process by which text-to-speech prompts were created, recorded and marked-up for production. Performed research in linguistics and phonetics to be utilized in the TTS engine's unique algorithms.
- Worked closely with voice talent to develop the "Interactions sound".

Education

B.S. Computer Science, 2004 Rutgers University

B.S. Biology, 1998 The Pennsylvania State University

Sun certified Programmer for the Java Platform

Sun certified Systems Administrator for Solaris

Technical Skills

Languages: Java, Python, Ruby, JavaScript (HTML5/CSS)

Frameworks: Spring, Jersey, TestNG, Jenkins

Tools: Git, Maven, Tomcat, PostgreSQL, WebGL, TeaVM Concepts: OOP, Functional Programming, Cloud Computing