Adam D. Graham

adamdgraham@gmail.com

EXPERIENCE

Senior Software Engineer - II   March 2022 - Present
Vrbo, part of Expedia Group
Austin, TX

- Developing an employer driven candidate quality screening application to help better match employers to job seekers by allowing tailored filtering and improving candidate quality

- Worked with a broad variety of of technologies, including Python 3, Django, React, Apollo GraphQL, Javascript, Typescript, MongoDB and MySQL

- Developed load testing tools and guided scaling efforts

- Helped design and build out the GraphQL API and integration

Staff Software Engineer   August 2016 - November 2021
Vrbo, part of Expedia Group
Austin, TX

- Team lead and developer for the Vrbo checkout application. This application was primarily React and Node with GraphQL interfaces to backend services.

- Responsible for driving the technical direction of the team and ensuring that technical tasks were understood and properly accounted for in our agile process.

- Developed two responsive greenfield calendar-based supplier-focused applications using React/Redux and LESS with a backend written in Java.

- Contributed to a long term project breaking apart a large monolithic application into smaller more agile pieces with the ultimate goal of achieving continuous deployment and faster turn-around for feature development and bug fixing using Node and Docker.

- Built out Splunk and DataDog monitoring dashboards to track application health and drive incident response.

- Actively involved in Vrbos interviewing and hiring process.

- Covered interim management duties for approximately 3 months for 3 teams after the previous team manager left the company.

Senior Full-Stack Software Engineer   May 2014 - June 2016
Comprehend Systems
Austin, TX

- Acted as a full-stack engineer on the development of a suite of new SaaS products aimed at enabling clinical trials.

- Responsible for developing the visual and structural components of the single-page application web front-end following responsive and reactive design principles. Used JavaScript and Facebook's React platform to write the components that make up the visual and interactive elements of the site. Used Sass, media queries

and breakpoints to implement a responsive design that displayed correctly on both desktop and mobile. Wrote the codebase in a clean and functional manner using libraries such as immutable.js and Underscore.

- Responsible for developing the back-end server application in Scala, building on top of Spray, Akka and Slick. Implemented the back-end code responsible for handling user-generated page and data queries from the front-end in a graceful and efficient manner. Developed additional functionality on the back-end using Storm and Kafka for data generation, messaging and logging.

- Performed testing including writing tests for the front-end code in Cucumber and Jest, as well as implementing tests for the back-end in ScalaTest and Specs2. Used tools such as JProfiler to tune and debug the back-end application, while the native browser debuggers were used to do the same for the front-end.

- Responsible for aspects of devops work such as instance deployments and monitoring with tools such as Ansible, Docker, Marathon, Mesos, haproxy, nginx and Elasticsearch. Ops work included being on-call for week long shifts to triage deployment issues.

- All application work was done following agile development principles.

- Was the first remote engineer at the company and established remote work practices and guidelines for the broader organization.

Technical Leader   Jan. 2010 - April 2014
Cisco Systems, Inc.
Advanced Security Initiatives Group - Research and Development
Austin, TX (December 2010 - April 2014)
Knoxville, TN (January 2010 - December 2010)

- Led and actively participated in numerous quality and security evaluations for a wide array of products resulting in improved product resilience. Methodology involved code audits, development of custom tooling in a wide variety of languages, architecture evaluation, testbed setup, live analysis using security scanners, and new security feature development following an agile-like methodology.

- Contributed as an engineer to an internal open source cloud networking initiative by creating and configuring Linux infrastructure VMs as well creating an automated VM creation program using libvirt.

- Contributing developer on internal Ruby on Rails based tooling projects.

- Developed and gave presentations to upper management and product business units about research findings and recommendations for improving product security and quality, as well as presentations on improving product security to the company as a whole.

- Boot-strapped a new Austin-based product security evaluation engineering site to full production including hiring and training.

- Focused on improving the security stance and quality of the Cisco product line from a company-wide process level.

Software Engineer   April 2006 - January 2010
Cisco Systems, Inc.
Knoxville, TN

- Developed primarily in C for IOS, Cisco's real-time embedded operating system as well as various Linux-based Cisco products.

- Developed and expanded critical features such as ASLR and Object Size Checking for Cisco IOS.

- Engaged in low-level hardware-specific feature development, focusing on MIPS and PPC to tighten memory permission mappings at the TLB level.

EDUCATION

Master of Science, Computer Science   December 2005
University of Tennessee, Knoxville, TN
GPA: 3.75/4.0
Thesis: Obtaining High Precision Results From Low Precision Hardware