

WORK EXPERIENCE

Google, Sunnyvale, CA 5/2017 - Present
Software Engineer, Site Reliability Engineer

- Member of the Cloud Networking SRE team responsible for the virtual networking components that power Google Cloud.

Aquto, Boston, MA 2/2012 - 4/2017
Principal Software Engineer
Technologies: Scala, Akka, MySQL, Couchbase, Elasticsearch, Amazon AWS

- Designed and implemented a netfilter-based traffic accounting system for IPsec VPN sessions.
- Extended the Linux kernel netfilter interface with a new accounting event type to emit real-time network traffic statistics.
- Implemented the native VPN management layer on both iOS and Android for Happy Hour.
- Implemented the native portion of a metrics gathering library for app engagement on Android.
- Participated in the backend implementation of multiple products in the advertising and sponsored data spaces including Kickbit, Move Zero, Happy Hour, and Data Perks.
- Developed an NGINX plugin that provided request routing and enabled multi-datacenter support for the backend products.

Attila Technologies, Hoboken, NJ 12/2009 - 2/2012
Product and General Manager
Technologies: Java, C, Objective-C, Android

- Ported the DPCC decision engine and policy control daemon to the Mac OS X and Android platforms.
- Developed a hardware abstraction layer that controlled, retrieved information about, and propagated events from the networking hardware on Mac OS X.
- Developed a notification based service that controlled the Attila DPCC platform running on Android phones.
- Managed the software development and testing efforts of a 10 person team through three major milestones.

Attila Technologies, Hoboken, NJ 4/2007 - 12/2009
Software Developer
Technologies: Java, C, Python

- Participated in the design and implementation of a multi-network transport protocol (MNTP) that enabled a single network flow to simultaneously utilize multiple network interfaces.
- Developed a decision engine and policy control daemon designed to manage network radios and flows through a Linux based mobile router.
- Developed a hardware abstraction layer that controlled, retrieved information about, and propagated events from the networking hardware on Linux.
- Developed a GUI that displayed network metrics and allowed for administration of the Attila DPCC platform.

Stevens Institute of Technology, Hoboken, NJ 6/2005 - 4/2007
Wireless Networking and Security Center
Technical Assistant
Technologies: PHP, Python, Java

- Began the design and development of a hypervisor based security testbed.
- Developed a reusable website framework for a resource management site.

- Implemented a shared cryptography application designed to only decrypt messages when a group of mobile devices are in a given location.

EDUCATION

Stevens Institute of Technology, Hoboken, NJ
Bachelor of Science in Computer Science, January 2007

Coursework: Artificial Intelligence, Quantitative Software Engineering, TCP/IP, Compilers, Database Design, Operating Systems

Continued: Data Science and Engineering with Spark XSeries from UC BerkeleyX, Introduction to Cloud Infrastructure Technologies, Big Data XSeries from UC BerkeleyX, From Nand to Tetris / Part I, Algorithms: Design and Analysis, Part 2, Algorithms: Design and Analysis, Part 1, Algorithms, Part II, Algorithms, Part I, Principles of Reactive Programming, Programming Languages, Introduction to Databases, Functional Programming Principles in Scala

SKILLS

Languages: Scala, Java, Python, C++, C, SQL, JavaScript

Databases: MySQL, Couchbase

Operating Systems: Mac OS X, Linux

PROJECTS

Eudypula Challenge - Finished the 20 task Linux kernel challenge in July 2014.