

WORK EXPERIENCE

Google, Sunnyvale, CA 10/2018 - Present
Software Engineer

- Member of the SWE team responsible for Andromeda, the software defined networking components that power Google Cloud.

Google, Sunnyvale, CA 5/2017 - 9/2018
Software Engineer, Site Reliability Engineer

- Member of the 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: Linux Kernel Debugging and Security (LFD440), Linux Kernel Internals and Development (LFD420), 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

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