

EXPERIENCE

Composable Analytics Cambridge, MA Aug. 2016 – Present Full-stack Software Engineer

Performing integral development and maintenance on an enterprise web application and analytics platform for scalable management, processing, and analysis of mission-critical business data streams. In a team of 4–8, acting as lead developer for a number of first-class platform features and new engineering solutions for product enrichment and client-driven analytics needs. Serving as an engineering, data science, and DevOps consultant for teams at industry-leading clients. Technical responsibilities include: web backend development in C#, WCF, Entity Framework, and SQL Server; frontend development with TypeScript/JavaScript, Angular, SystemJS, JSPM/NPM, Gulp, HTML5, and Sass; and general data orchestration/analytics using a variety of tools, but primarily the *Composable Enterprise* platform itself.

Comcast Philadelphia, PA Summer 2014 Product/Software Engineering Intern

Supported the Commercial Voice Product Solution Engineering team at Comcast Business. Designed and developed a solution for handling rich telephone directory listings and reducing related costs: a web application for a user base of 20+ million customers. Additionally, conducted UX design work as part of a team piloting an embedded application for the X1 platform and built a tool which automated reporting of sales statistics for mobile applications.

Vecna Technologies Cambridge, MA Summer 2015 Electrical/Firmware Engineering Intern

Developed firmware applications on ARM and PIC microcontrollers governing low-level sensor and battery management systems for large-scale fully autonomous robotic automation solutions for industrial and commercial environments. Supported Vecna's Robotics Logistics Solutions division via design of next-generation robotics hardware, troubleshooting electrical systems, and development of firmware for device communications over bus protocols (I²C, CAN) and robot configuration over serial interfaces.

iD Tech Camps Villanova University, PA Summer 2013 Java Instructor, Camp Counselor

Designed and taught courses in Java programming for ~60 students aged 12 to 17. Topics included basic programming concepts, inheritance, polymorphism, error catching, classes, sorting, searching, recursion, basic data structures, and graphical interfaces in Swing. Guided each student in designing and building a final project meeting high standards for proficiency. Jointly responsible for the well-being of 60–100 campers at all times.

Previously

2012: *Java & Web Instructor*,
Devon Preparatory School (summer program)
2011: *Web Development Intern*, Drexel University MET-Lab

EDUCATION

Princeton University Princeton, NJ B.S.E. in Electrical Engineering, Certificate in Computer Science Honors: Cum Laude; Sigma Xi Research Society

Coursework: Computer Architecture, Full-stack Web Development, Electrical System Design & Implementation, Sensors & Bus Protocols, Embedded Devices, SBC Programming, Digital Logic Design, Cryptography & Information Security, Circuit Design, Basic Classical Control, Semiconductor Devices, Algorithms & Data Structures, Systems Programming, Signals & Systems

May 2016
GPA: Departmental 3.84 / 4.00,
Overall 3.60 / 4.00

TECHNICAL SKILLS

Proficient with:

Software Engineering: C#, .NET, Node.js, Java, C, WCF

Example use cases: enterprise-grade web server backends (C#), REST API microframeworks (Node.js), desktop software & command-line cryptographic tools (Java), ARM microcontroller programming for robotic sensor systems (C)

Web Frontend Development: TypeScript/JavaScript, Angular (v1 & some v2 via ng-forward), Sass, SystemJS, JSPM/NPM, Gulp, jQuery, Bootstrap, HTML5, CSS3, UI & UX Design

Data: SQL Server & SSMS, MongoDB, Entity Framework, LINQ, SQLite

Version Control: Git, Team Foundation Server

Platforms: Windows, GNU/Linux (Ubuntu/Debian), macOS

Productivity: Microsoft Office, LibreOffice, G Suite

Graphic & Interface Design: Adobe Photoshop, Illustrator, InDesign, Lightroom, Dreamweaver, Bridge, Acrobat, GIMP

Familiar with:

Software Engineering: Python, Android Java, MATLAB, MIPS & IA-32 Assembly, R, Processing, Subversion, Visual Basic (brief experience with Simulink, C++, CUDA C++)

Hardware Engineering: PCB layout & DFM (EAGLE), communications protocols (I²C, CAN, RS-232, UART, XBee), CPU implementation & design (Verilog, FPGAs), digital/analog circuits, PID controllers, optoelectronics, SPICE, semiconductor fabrication (etching/photolithography), oscilloscopes

Firmware Engineering: ARM M4/7, PIC18/32, BeagleBone (Python), Arduino, Cypress PSoC

Web Development: PHP, WordPress, Drupal