MATTHEW VAUGHAN

Software Engineer

Little River, SC



EXPERIENCE

Independent Contractor

Focus EduVation

i 10/2019 - 03/2020

• Woburn, MA

Offers a portfolio of services to enable online learning for businesses and universities

 Provided assessment materials, derived from lectures, for online courses educating students of information technology and/or data science.

Associate Member of Technical Staff (Software Engineer II)

Salesforce (by aquisition of Demandware)

World leader in CRM with an inclusive corporate culture Acquired Demandware in 2015 for \$2.9B

• Utilize Java/Spring-MVC/Velocity template/HTML/JavaScript stack to implement security and platform features for a world-class SaaS ecommerce product (DemandWare) with thousands of enterprise tier clients (Kate Spade, ADIDAS, iRobot, Starbucks) and users in the hundreds of millions

Research Assistant

Tufts University

d 01/2015 - 05/2016

Medford, MA

Selective "right sized" university in Medford, Massachusetts

- Design declarative portion of a nano pass compiler in SML/NJ based on Andy Keep's work
- Implement a byte code executing virtual machine with parallel and concurrent generational garbage collection in the C programming language
- Target C, JVM, LLVM, and x86_64 ASM as output languages for compilers

Software Engineer

International Business Machine (IBM)

Monolithic employer of 300,000 with a hundred-year history gambit spanning product portfolio, among the few engaging in basic research

• Utilize Java/Dojo/HTML/JavaScript/XML stack to implement and test user interfaces for enterprise order management system (used by Target, Best Buy, Walmart, etc)

Database Manager

Phoenix Technologies (by aquisition of Touchstone Software)

= 02/2006 - 12/2008

Software giant ubiquitous with BIOS

North Andover, MA

Acquired Touchstone Software in 2008 for \$18M

- Keep 'DriverAgent' database of drivers up-to-date with most recently released hardware drivers for all Windows OS
- Write PHP scripts to automate process and generate reports

EDUCATION

B.S. Computer Science minor Mathematics

GPA

University of Massachusetts -Lowell

3.9 / 4.0

= 2010 - 2013

Ph.D. (Incomplete)

GPA

Tufts University

3.8 / 4.0

= 2015 - 2016

STRENGTHS



Microservices

Employing docker containerized microservices for web servers, databases, middleware, and **REST** API fulfillment



Full Stack

Java, Python, Scala, Node.js, and PHP stacks with Apache, Nginx, Tomcat, and Django servers generating HTML, CSS, and **JavaScript**



E-Commerce and Order Management

Developing features for the **DemandWare** platform (Saleforce) and implementing user interfaces for Sterling order management (IBM)



Leadership

Subcontracting as many as four additional engineers to support larger contracts



Written and verbal communication Skills

164 verbal GRE score



"Photographic" memory

Perfect scores on delayed (<0.1%) and intermediate recall (<5%) indicated by **BVMT**



SKILLS

Languages (years)

 PHP(12)
 Java(6)
 C(8)
 C++(5)
 HTML(12)

 JavaScript(12)
 CSS(10)
 Haskell(2)
 Scheme(3)
 SML/NJ(3)

 Scala(4)
 JSP(5)
 Node.js(4)
 JSON(11)
 XML(11)

Tools

Python(3)

Git Jenkins Bash SSH Virtual Box

VMWare Workstation Linux RDP AWS Docker

Kubernetes

Databases and servers

Oracle MongoDB Tomcat Apache Nginx

OpenSMTPd Django Express

SUMMARY

I started programming as a teenager and worked in the tech industry after high school. I decided to return to school to hone my skills and legitimize myself as a software engineer. I graduated summa cum laude with a bachelors degree in computer science (two courses shy of a second bachelors in mathematics). I was encouraged to continue my studies in graduate school by my professors, but had accepted a job offer at IBM. Where I worked for a year before attending Tufts University to pursue a Ph.D.

Due to illness, I had to leave both graduate school and my engineering position in 2016. Since making a full recovery two years ago I have freelanced to pay the bills and now wish to return to my chosen profession full time.