Professional Experience

Bank of America Corporation - Charlotte NC

*Officer - Global Technology Analyst* May 2017 - Current

* Design, develop, and test natural language processing models for improving business analyst processes using Python, NLTK, Spacy, and Stanford statistical platforms
* Application lead for metadata user interface including latest Angular principles and SPA application design
* Plan key data mappings using TSQL, JSON/No-SQL, and .NET integration testing large datasets in general
* Enhance software build automation converting entire code base from SVN to Git and using continuous integration principles with Jenkins, Artifactory package builds, and DevOps tools
* Utilize web minification techniques/tools such as Gulp/Webpack to decrease application build sizes as well as build reusable Typescript components
* Analyze and perform data validations for metadata core data lineage end-to-end flows

*Intern - Applied Technology Program*  January 2016 - May 2017

* Worked as a software engineer for Corporate Treasury team and Risk Retail Technologies developing capabilities for data management visualization tools with D3JS, C# LINQ, and Oracle database client
* Enhance production support team Java/JSP enterprise application with XML/SQL database interactions
* Improved team efficiency during development lifecycle for metadata reporting by patching defects, user requirements updates, and architecture documentation
* Develop entire software-engineering based curriculum for incoming applied technology class with SQL fundamentals, core testing principles, OOP concepts, and Agile methodologies

Encrypted Labs Software - Charlotte NC

*Back-End Tech - Programming Consultant* October 2015 - December 2015

* Designed mobile friendly small business websites using intuitive UIs as well as backend fixes
* Led design experience for e-commerce layout for crypto-currency based marketplace backed by investors
* Maintained website infrastructure such as file read/write security access, SSL, and CDN region upgrades
* Developed chat application using web sockets for custom solution for interactions with customers

Technical Skills

**Knowledge Areas:** *Application Development/Deployment, API Engineering, Data Analysis, Infrastructure, Architecture Reviews, Testing & Quality, Data Engineering, Process Improvement*

**Core Programming Languages:** *C#, Java, Python, C*

**Front-End:** *JavaScript (ES5, ES6), TypeScript, jQuery, AJAX, HTML5, Angular, AngularJS, React, CSS*

**Back-End:** *.NET, Entity Framework, Node, NPM, Express, Nginx, Apache, JSP Servlets, GraphQL*

**Databases:** *SQL Server, Oracle, MongoDB, MySQL*

**Version Control:** *Git, Subversion*

**DevOps:** *Jenkins CI, Artifactory, Ansible, MSBuild, Docker, FaaS platforms, virtual containers*

**Testing Frameworks:** *UI/browser Automation, Application Testing (JUnit, NUnit), Data Validation*

**Information Security:** *Firewall Management, Log Analysis, Intrusion Detection, Defensive Application Programming, Network Vulnerability Analysis*

**Environments:** *Windows, Unix, Visual Studio, VS Code, Eclipse, Netbeans*

Freelance Projects

Housing Market Estimator

* Created machine learning based pipeline to estimate housing prices for given area using APIs from Zillow along with open source machine learning toolkits
* Utilized APIs to integrate neighborhood security checks for zip codes along with price analysis
* Integrated Java web application for users to check on accurate price models and used web scraping to gather appropriate data for ML pipeline

Distributed Systems DevOps Pipeline

* Utilizing multiple machines created a distributed cluster using Docker Swarm to deploy and run services such as nginx containers, custom node applications, as well as reverse proxy for HTTPS
* Created automated weekly backup process for cluster as well as health checks for down-time rollovers
* Deployed a Discord (chat app) bot to listen for user requests and return results based on chat interactions

Personal Finance Dashboard

* Designed fully custom from-scratch Java web application using Google Firebase and JavaScript. Wrote authentication based on per-user profile and JSON rules for key-value store database
* Integrated useful charts such as history grid of spending, finance over time, etc.

Education

Bachelor of Science in Computer Science  Graduated: May 2017

University of North Carolina At Charlotte Magna Cum Laude

* Chancellor's List of Students 2014-2017