

Abieshek Subramaniam

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| US Citizen | (302)-367-3479 | 625 S Goddard Blvd, King of Prussia, PA 19406 | Active Security Clearance |

EDUCATION

Georgia Institute of Technology - College of Computing (Atlanta, Georgia) **June 2018 - May 2022**

Bachelor's in Computer Science (High Honors): Object-Oriented Programming, Data Structures and Algorithms, C Programming and Computer Intricacies, Agile and Iterative Development, UI Design, Information Visualization in JS, Applied Combinatorics, Discrete Mathematics, Linear Algebra, Computer Graphics, Design of Online Communities, Computer Animations

WORK EXPERIENCE & LEADERSHIP

Application Developer (Mid Level) - Compass Point an Akima Company (Remote) **December 2023 - Current**

- **Cybersecurity and Full Stack Application Development (Backend & Frontend)** project to replace outdated Defense Finance and Accounting Service (DFAS) interface into 412 core modules (originally written with COBOL, Struts Framework and JSP) with each module comprising approximately three screens for a total of over 1,200 Java screens replaced using Java 17, Spring Framework, Oracle, JDBC, JPA, Thymeleaf (Java XML/XHTML/HTML5), GitLab, Docker, and Maven in a Jira-managed agile environment.
- The update addressed cybersecurity concerns raised by outdated application software that was being used to communicate with more than 1,000 COBOL financial and inventory programs.
- Maintained a rigorous coding schedule for the duration of the contract resulting in the remediation of over 60,000 Fortify scan issues resulting in improved system security, reduced Java vulnerabilities, and compliance with DISA security standards.
- Maintained 85% JaCoCo code coverage with JUnit Testing and Mockito and regularly deployed to our CI/CD Pipelines with GitLab Ultimate.
- Performed technical training to government clients including demonstration of complete toolchain for remediation of System Acceptance Testing (SAT) issues and developer environment setup for project handoff.

Software Engineer - Cognizant (Atlanta, GA)

June 2022 - August 2023

- **Full Stack Software Development (Backend & Frontend)** using Java, SQL, Spring, JPA, JDBC, and Angular. Individually designed and developed a full-stack data file generation program to create database ready files based on a specification input file and raw data inputs with Java, Spring Boot, REST APIs, and Angular Front-end that saved hundreds of hours of manual data translation and modifications for a F-500 client.
- Generated documentation and performed application demos for project incorporation.

VIP Team Lead for Embedded Systems Research - Georgia Tech (Atlanta, GA) **August 2020 - December 2021**

- **Team Lead for the Research and Development** of smart city infrastructure and a secure voting platform through utilization of configurable hardware (FPGA- PYNQ) as a computational platform. Led team meetings and organized and integrated work across different sub-teams while delegating tasks to individual members.
- Developed and modified PYNQ overlays using Vivado and developed scripts to automate this process; Synthesized and implemented an AES encryption and decryption core to be used for general information encryption in the voting system; Designed, developed and synthesized GPS module drivers for the PYNQ board using Python and C.

SKILLS

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|------------------------|--|
| Languages | Java, SQL, HTML, TypeScript, JavaScript, CSS, Python, COBOL, C |
| Frameworks & Libraries | Spring Framework, Angular, Hibernate ORM, REST API, Thymeleaf, Bootstrap, Node.js, D3.js, Struts Framework, JSP |
| Database | JDBC, JPA, Oracle, MySQL |
| Development Tools | IntelliJ IDEA Ultimate, Eclipse, Toad, Jira, Docker, Maven, AWS, Git, GitLab Ultimate, CI/CD (AWS & Github Workflow), Vivado, Firebase, Microservices, Atlassian Suite (Bitbucket, Confluence), Postman, Visual Studio |
| Testing | JUnit, Mockito, Unit Testing, System Integration Testing, System Acceptance Testing, JaCoCo, Fortify (Static Code Analyzer) |

PROJECTS

Innovate for Impact Challenge

June 2022 - August 2022

- Led a team of five new developers to architect and develop a full stack enterprise application using Agile Development practices (Kanban Board) to connect local farmers to the average consumer to provide a healthier alternative for produce.
- Application used Java, Spring Boot, JPA, Angular, Bootstrap, and REST APIs and divided general shopping services into microservices (e.g., Cart Microservice, Produce Inventory Microservice, User Microservice) and won top two within the company (Cognizant).

Movie Data Visualization Using D3 JS Library

November 2021 - December 2021

- Designed an interactive data visualization using JavaScript (D3 library), CSS, and HTML.
 - Visualization provided scatter plots based on hundreds of movie data points with modifiable axes, movie-year filters, and hover-click interactions for more detailed information about data presented in another plot.
- Smash-Style GBA Video Game Using C to Manipulate GBA Hardware** **January 2020 - May 2020**
- A smash-style game in C with simple animations, displaying images in multiple formats, double buffering for smooth animations, reading buttons, using indexed color, tiles, and sprites, using dynamic memory access to speed up animations, starting, stopping, and looping sounds and game logic.
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ACTIVITIES

Home Depot Hackathon

January 2020

- Developed a program to optimize product distribution and revenue based on data analysis while meeting product demands.

Volunteered at Local Hospital and School Events

August 2013 - June 2017

- Volunteered for 500+ hours at Union Hospital working with employees and nurses to help with patient needs such as equipment transport and preparation.