Akash Arumugam Venkatachalapathy

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EDUCATION

Northeastern University

Boston, MA

Master of Science in Software Engineering Systems

Expected May 2025

GPA: 3.85/4.0

Relevant Coursework: Object Oriented Design, Web Development, Data Structures and Algorithms, Enterprise Software Design.

Sri Sivasubramaniya Nadar College of Engineering

Chennai, India

Bachelor of Engineering in Electrical and Electronics

April 2021

Relevant Coursework: Cloud Computing, Object-Oriented Programming using Java, C Programming, Problem solving and Python Programming.

TECHNICAL SKILLS & TOOLS

Programming Languages: Python, Java, JavaScript, TypeScript, Java, C, C++

Web Technologies: HTML, CSS, SASS, React.js, Node.js, Express.js, Redux, Spring MVC, Jakarta EE, Bootstrap

Databases/Frameworks: MongoDB, SQL Server, MySQL

Tools: Git, GitHub, Veracode, Nessus Pro, Qualys, CrowdStrike, Splunk, AWS, Azure, ServiceNow, MS Excel

WORK EXPERIENCE

LTIMindtree (formerly Larsen & Toubro Infotech)

Chennai, India

Security Engineer

August 2021 – August 2023

- Conducted source code analysis using static application security testing tools to identify and mitigate security vulnerabilities, demonstrating strong analytical skills and proficiency in cybersecurity measures
- Reviewed and prioritized identified vulnerabilities based on severity, showcasing attention to detail
- Performed information system security vulnerability scanning across networks, operating systems, applications, and databases, highlighting expertise in risk characterization and mitigation on Windows and Linux platforms
- Led client calls to update on vulnerability mitigation progress, showcasing excellent communication skills and project management capabilities
- Developed risk-based mitigation strategies for networks, operating systems, and applications, aiding in the remediation of 800k backlog vulnerabilities and contributing to organizational security enhancements
- Recognized as Star Performer of the Year 2022 for instrumental contributions in mitigating 90% of backlog vulnerabilities, demonstrating exceptional commitment to security and collaboration with cross-functional teams

PROJECTS

Health360 - Fitness Tracking Web Application (MERN stack)

September 2023 - December 2023

- Designed and developed a user-friendly fitness tracking web application with an intuitive user interface emphasizing ease of navigation and an overall positive user experience. Integrated features for tracking food and exercises, utilizing the Nutritionix API to enhance the application's functionality
- Utilized the MERN stack (MongoDB, Express.js, React.js, Node.js) in the development process, seamlessly integrating RESTful APIs for all CRUD operations. This approach ensured a robust foundation for personalized diet plans, workout tracking, and community engagement features within the application

Vimaan Airlines - Flight Management System (Java)

September 2023 - December 2023

- Implemented a Java Swing GUI application to proficiently manage domestic and international flight schedules, bookings, and passenger details
- Applied OOP and SOLID design principles and incorporated advanced software concepts such as Lazy, Eager, and Enum Singleton factory patterns. Additionally, utilized Stream API, Lambdas, CSV file handling, and Multi-threading techniques to optimize functionality and performance

Estimating State of Charge of Lithium-ion batteries using ANN (Python)

January 2021 - April 2021

- Developed a program to examine the suitability of two different ANN algorithms that could be used to estimate the State of Charge of lithium ion batteries
- Implemented back propagation neural network (BPNN) and resilient back propagation neural network (RPROP) algorithms and evaluated the effect of hyperparameters on the training and accurate estimation of the state of charge