

Nishanthan Ravichandran

Windsor, ON | +1 (226) 961-1701 | modachu@uwindsor.ca | [LinkedIn](#) | [GitHub](#) | nishanthan22.github.io/portfolio/

SUMMARY

- **Software engineer** skilled in AI/ML, web development (**Flask, Django, Spring**), scalable systems, delivering impactful solutions across diverse platforms.
- Expert in optimizing performance, **leading teams**, implementing **cloud-based (AWS)** and **database-driven applications solving client needs**.

EDUCATION

Master of Applied Computing University of Windsor, Windsor, Ontario	Sept 2023 - Present GPA: 85/100
---	------------------------------------

SKILLS

Programming Languages:	Java, Python, C, C++, Shell Scripting, SQL, HTML, CSS
Frameworks:	Spring Boot, Hibernate, React, Node, Flask, Django
Database:	MySQL, PostgreSQL, MongoDB, Amazon RDS, Firebase, SQL Server Management Studio
DevOps/Cloud:	AWS, GCP, Docker, Kubernetes, GitHub
Version Control / Management:	Git, JIRA, Asana, ServiceNow
Software Methodologies:	Scrum, Agile, Waterfall, Lean Six Sigma, SDLC, Object-oriented Design
Tools & Platforms:	Android Studio, Spring Tool Suite, VS Code, Eclipse, Linux, Maven, Gradle, Postman
Professional Skills:	Mobile app development, Web development, Cloud, Data analysis, ETL, Data visualization

PROFESSIONAL EXPERIENCE

Sears Holdings Corporation Designation: Software Engineer Intern Java, Spring Boot, AWS, JUnit, REST, WebSocket, Spring Tool Suite, Redis, PuTTY <ul style="list-style-type: none">• Developed and optimized 50+ RESTful APIs and 30+ JSON event offers for microservices, improving system performance by integrating logging and monitoring mechanisms using Java Spring framework.• Enhanced transaction speed by 60% across a user base of 80 million+ in the USA by optimizing the payment platform using AWS WebSocket, Redis and Deque.• Managed deployments in UAT, QA, and PROD environments on AWS, ensuring consistent updates in an Agile setup and wrote JUnit test cases for robust API performance.• Automated security processes by scripting token generation for API, managed batch jobs on UNIX servers using Shell scripting. Recognized by Senior Principal Architect and Business Unit Head for exceptional internship contributions. (Link)	Jun 2022 – Jun 2023
AllSoft Solutions Designation: Android App Development Intern Java, Kotlin, XML, Firebase, Testing, Android studio, Figma, Mobile development <ul style="list-style-type: none">• Led the complete development lifecycle of an Android media player app using Java, Firebase, and XML managing builds with Gradle and overseeing a team of 4.• Developed user-focused features for profiles, playlists, favorites, and history tracking, leveraging Firebase Realtime Database for efficient data management.• Delivered a top-rated project, recognized for creating a visually appealing XML-based UI optimized for smooth playback and intuitive navigation of 500+ files.• Ensured app stability through rigorous testing and debugging across Android versions 5.0 to 10 for optimal performance.	Jun 2021 – Aug 2021

PROJECT EXPERIENCE

Brainy Bits AI Flask, Python, OpenCV, TensorFlow, Keras, AWS RDS, MySQL, Image Processing <ul style="list-style-type: none">• Built an AI application to monitor classroom activities, capturing students' head poses, emotions, and eye movements with 97% accuracy, generating detailed attentiveness reports. Conducted data analysis and represented using line and pie charts.• Utilized Flask for the web framework, OpenCV for image processing, and TensorFlow/Keras for model development, leveraged MySQL hosted in AWS RDS for efficient data storage, implementing optimized queries and indexing for faster data retrieval and analysis.	
RCube Green Ecom Django, Python, HTML, CSS, JavaScript, SQLite 3, GitHub, Git, Authentication, UI/UX, Google API <ul style="list-style-type: none">• Developed dynamic ecommerce and blog platform for eco-conscious users integrating Google Sign-In authentication, APIs.• Designed intuitive UI with Django forms, views, and models, ensuring smooth user experience, efficient database management, robust functionality.	
UNIX Shell + C, Linux, System programming, Unix, Sockets, Load Balancing, Bash Scripting <ul style="list-style-type: none">• Built a client-server application with load balancing, dynamically redistributing client connections across main and mirror servers to optimize resource usage when server load exceeds 70%.• Enhanced UNIX shell functionality supporting piping, redirection, file operations, and advanced bash commands.	
Nourish Nation Hadoop HDFS, Python Dash, Random Forest, Algorithms, Hive, NLP, XGBoost, HTML5, CSS3, JavaScript <ul style="list-style-type: none">• Developed a framework integrating 100 years of weather and nutritional data, predicting crops for pregnant women and the malnourished with 96.59% accuracy using Random Forest ML.• Processed large datasets using Hadoop HDFS and Hive for scalable storage and built interactive dashboards to help farmers improve pre-harvest crop yield, supporting UN SDG 2030 goals.	

PUBLICATIONS

• WebSocket technology AWS WebSocket API and SockJS Library, LinkedIn	Apr 2024
• An Empirical Study on Architecture and Efficiency of Dalvik VM and Android Runtime (ART), IJRASET	Aug 2022