

# Nishanthan Ravichandran

Windsor, ON | +1 (226) 961-1701 | [modachu@uwindsor.ca](mailto:modachu@uwindsor.ca) | [LinkedIn](#) | [GitHub](#) | <https://nishanthanmr.com/>

## EDUCATION

### Master of Applied Computing

University of Windsor, Windsor, Ontario

Sept 2023 - Present

GPA: 85/100

## SKILLS

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

## PROFESSIONAL EXPERIENCE

### Sears Holdings Corporation

Jun 2022 – Jun 2023

**Designation: Software Engineer Intern | Java, Spring Boot, AWS, JUnit, REST, WebSocket, Spring Tool Suite, Redis, PuTTY**

- 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](#))

### AllSoft Solutions

Jun 2021 – Aug 2021

**Designation: Android App Development Intern | Java, Kotlin, XML, Firebase, Testing, Android studio, Figma, Mobile development**

- 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, leveraging **Firebase Realtime Database** for **data management**.
- Earned **best project** recognition for **amazing 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.

## PROJECT EXPERIENCE

[Brainy Bits AI](#) | **Flask, Python, OpenCV, TensorFlow, Keras, AWS RDS, MySQL, Image Processing**

- 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 web framework, OpenCV** for **image processing**, **TensorFlow/Keras** for **model development**, **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**

- 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**

- 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**

- 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