HIMANSHU KIRAN GARUD

(704) 726-8160 | garudhimanshu4@gmail.com | Portfolio | linkedin.com/in/himanshu-garud/

Education

University of North Carolina at Charlotte **Aug 2023 – Present**
Masters of Science in Computer Science *GPA: 3.9/4.0*
Courses: Algorithms, Data Structures, Software Engineering, Object Oriented Programming, Mobile Application Development, Artificial Intelligence

Experience

EPRI – *Software Engineer Intern, United States* **June 2024 – Present**

- Developed EPRI subscriber website using **Vue.js** and **TypeScript**, ensuring 95% cross-device compatibility.
- Created dynamic graph visualizations with **D3.js** and **ObservablePlot.js**, accurately plotting complex scientific data and reducing rendering time by 20%.

Persistent Systems – *Software Engineer, India* **May 2021 – July 2023**

- Created **YAML** feeds for *Renaissance Learning (US)* reducing **AWS billing time** by 65% and improving performance by 40%.
- Migrated from **GraphQL** to **SQL server**, reducing runtime by 30% and boosting data processing efficiency using **AWS, SQL** and **Shell scripting.**
- Automated **ETL** pipelines, optimized queries, and improved processing speed by 25% with **Python** and **Google BigQuery (DBT)**.
- Conducted research to analyze common query patterns, leading to managing a subsidiary project and automating 100+ data feeds for *Oscar Health (US)*, optimizing AWS billing time.

Eastro Control Systems – *Full Stack Developer Intern, India* **Dec 2019 – Feb 2020**

- Developed a web application with fault tolerance to ensure reliable work-hour updates and approvals for 50+ employees, using **Python Flask** for backend and **HTML/CSS/JavaScript** for frontend.
- Designed a normalized **SQLite** database schema with indexing strategies to optimize query performance and scalability, improving operational efficiency by 30%.

University of North Carolina at Charlotte – *Research Assistant, United States* **Jan 2024 – May 2024**

- Developed Deep Learning models **(3D CNNs)** for dynamic **3D human mesh** reconstruction using commercial mmWave radar with point cloud data, achieving a 2.47 cm average error in vertex localization.
- Integrated **VTrig-74** sensor for real-time data collection, enabling precise mesh formation.

Technical Skills

Programming:	C, C++, Java, Python, JavaScript, OOPS.
Frameworks & Libraries:	Node, VueJS, Streamlit, REST API, HTML/CSS, Bootstrap, React.
Cloud:	AWS, SQS, SNS, Lambda, CloudWatch, Docker, DBT.
DB & OS:	SQL, Oracle DB, MongoDB, PostgreSQL, MySQL, PostgreSQL, BigQuery, Linux
Tools & Platforms:	Git, Github, TypeScript, Postman, JIRA, OpenAPI

Projects

Depression Classification Model

- Designed and deployed a user-friendly web application for depression severity assessment using PHQ-9 questionnaire, integrating **Python Flask, HTML, CSS, and JavaScript.**
- Implemented advanced machine learning techniques, including **MLP classifier (85% emotion classification accuracy), OpenCV, and DeepFace, achieving 89%** sensitivity in depression severity classification.

Achievements

- Awarded the **High Five Award** at Persistent Systems for demonstrating proactiveness in understanding project functionality **FY21 Q2**.
- **Published Research Paper** *"Machine Learning Based Depression Classification Model"* in **IJCRT journal, June 2022 (Impact Factor: 7.97)**.
- **Published Review Paper** *"Fake News Detection And Classification Using Distinct Machine Learning Algorithms"* in **IJCRT journal, January 2021 (Impact Factor: 7.97)**.