

# ROSHAN DHARAN

Los Angeles, CA 90007 | (213) 930-3816 | [rhashid@usc.edu](mailto:rhashid@usc.edu) | [LinkedIn](#) | GitHub

## EDUCATION

### University of Southern California

*Master of Science in Computer Science*

Aug 2025 – Present

Los Angeles, CA

### REVA University

*Bachelor of Technology in Computer Science and Engineering, GPA: 3.97/4*

Jul 2019 – Jul 2023

Bengaluru, India

- **Coursework:** Data Structures and Algorithms, Object-Oriented Programming (Python/Java/C++), Advanced DBMS, Operating Systems, Machine Learning, Artificial Intelligence, Cloud Computing, Big Data, Data Science with R

## TECHNICAL SKILLS

**Languages:** Python, SQL (PostgreSQL, CCL), Java, C++, JavaScript, MATLAB

**Backend Tools:** Spring Boot, Java FX, CI/CD(Github Actions), Mockito, Cucumber

**Big Data/Cloud:** Databricks, Snowflake, GCP, AWS, OCI, Oracle Cerner Millennium EHR

**ML/AI Tools:** TensorFlow, Keras, PyTorch, OpenCV for multimodal predictive modeling, NLP

## EXPERIENCE

### Keck Medicine of USC

*SWE Intern, Clinical Applications*

Nov 2025 – Present

Los Angeles, CA

- Spearheaded development for clinical applications integrated with **Millennium EHR**, delivering **5+ UI enhancements and bug fixes** supporting workflows for **50+ internal clinical users**.

### Oracle

*Associate Software Engineer, AMS Custom Reporting*

Oct 2023 – Jul 2025

Bengaluru, India

- Led advanced analytics initiatives at Children's National Hospital across 17+ departments, driving **30–40%** reduction in report runtimes and reclaiming **500+ staff hours/year** by leveraging predictive models and automation.
- Managed a team of 6 to design MedeAnalytics SQL pipelines, processing **600,000+ patient records daily**, performing data wrangling and ETL, and delivering financial metrics shaping **\$200M+ revenue decisions**.
- Created and transmitted 340B Extract to vendor using SQL, MoveIT, and Pharmacy Clinical Surveillance; streamlined workflow reclaimed **114 hours/year** and cut pharmacy drug spend by **\$12M+ annually**.
- Developed CLABSI Audit system using Infusion Suite, Mobile Vitals Collection, and PowerChart, monitoring **500+ patients weekly**, freeing nurses from **15+ hours/week** of manual checks.

### Oracle Cerner

*Analytics Intern, International Consulting PMO*

Jan 2023 – Jul 2023

Bengaluru, India

- Migrated **5 enterprise-level Power BI reports** from on-premise and **SharePoint** platforms to **Snowflake Cloud**, centralizing fragmented data by rebuilding complex KPIs with DAX. Automated offline-to-online data entry via **Python multithreading + Selenium**, cutting manual processing by **44 hours per 1,000 rows**.

## PROJECTS

### ICU Outcome Prediction — *Sklearn, PyTorch, Streamlit*

Jan 2025 – May 2025

- Built a multimodal ICU outcome predictor combining LSTM vital sign modeling with **BioClinicalBERT embeddings**, improving **AUROC by 6–8%** over NLP baselines.
- Designed and implemented end-to-end ML workflows, including **TF-IDF feature extraction** from 5,000+ clinical note features with logistic regression, deployed as a **REST API service** with CI/CD integration for reproducibility.

### AI-Powered Battery Management System — *Python, ML & Deep Learning*

May 2023 – Nov 2023

- Engineered deep learning models predicting EV battery State of Charge (SoC) and State of Health (SoH) over 5,000+ charging cycles, enabling **adaptive eco-charging** to extend battery life and significantly improve efficiency.
- **Research publication** — Published in *International Journal of Computational Learning & Intelligence*, 2023. <https://milestoneresearch.in/JOURNALS/index.php/IJCLI/article/view/82>

## HONORS & AWARDS

### Oracle Pinnacle Award — Invented memory allocation method adopted org-wide.

Jun 2025