Rushi Raval

Waterloo, ON | 4167317639

r3raval@uwaterloo.ca | linkedin.com/in/rushiraval0 | github.com/rushiraval0 | leetcode.com/rushiraval0

SKILLS

Languages: Java, Kotlin, C++, C#, SQL, Shell, HTML, CSS

Tools: AWS, GCP, Jira, Docker, Kubernetes, Power BI, Jenkins, Git, Excel

Databases: MySQL, MS SQL, Postgres, Firebase

Frameworks: Keras, TensorFlow, PyTorch, ASP .NET, REST, Spring Boot, SOAP Libraries: Retrofit, RxJava, jQuery, Jetpack Compose, NumPy, Pandas, OpenCV

Certificates: Obtained Machine Learning Foundations and Cloud Foundations certificates on AWS (Link)

EDUCATION

Master of Engineering in Computer Engineering

September 2023 - September 2024 (Expected)

University of Waterloo

Bachelor of Technology in Information Technology

December 2020 - May 2023

Dharmsinh Desai University

Diploma of Engineering in Computer Engineering

Government Polytechnic Ahmedabad

August 2017 - November 2020

RELEVANT COURSEWORK

- Mobile Application Development
- Database Systems
- Cloud Computing
- Operating Systems

- Data Structures and Algorithms
- Machine Learning
- Software Development Life Cycle
- Algorithm Design and Analysis

RELEVANT EXPERIENCE

Project Intern, Institute for Plasma Research

December 2022 - March 2023

- Monitored 4 new functionalities post driver code updates to optimize IOC performance, spearheaded collaboration within a team of 3 scientists to integrate the EPICS framework for a LIGO project.
- Leveraged Archiver Appliance to fetch and monitor process variables from 5+ vacuum gauges and particle accelerators via SQL, enabling real-time analysis of 1000+ data points.
- Debugged and resolved numerous errors encountered during the configuration of the EPICS (Experimental Physics and Industrial Control System) framework on the Linux platform, ensuring seamless integration and functionality.

Android Developer Trainee, *InfoLabz*

May 2019 - April 2020

- Developed 5+ Java-based mobile applications using Android Studio, applying OOP principles and implementing MVC/MVP/MVVM design patterns for enhanced user experience.
- Coordinated with QA teams to implement CI/CD via Jenkins, ensuring consistent app functionality across Android; achieved a 40% reduction in deployment time and increased unit-test coverage by 25%.
- Utilized Notion to efficiently keep track of progress across all project phases, documenting comprehensive reports detailing 25+ requirements, design specifications, and implementation details.

PROJECTS

Hybridclass - Android Application, Dharmsinh Desai University

(GitHub) - (Video)

- Engineered a Java application utilizing REST APIs for data exchange to facilitate 7+ in-class activities such as attendance tracking via QR codes, material sharing through Firebase with Firestore, and quiz through sessions for professors.
- Designed 20+ visually appealing and user-friendly Android interfaces using Jetpack Compose, employing objectoriented design techniques and XML to craft intuitive and modern user experiences.
- Implemented secure authentication using Firebase Realtime Database and applied comprehensive validation to all application controls, ensuring data integrity. Over 200 students and professors have used it so far!

Spotify Music Discovery - Database/ML Project, University of Waterloo

(GitHub) – (Video)

- Programmed Streamlit using Python and Spotify Web API to create an intuitive web interface, enabling users to receive personalized music recommendations using 2 different models based on the listening habits.
- Modelled Spotify database in MySQL from scratch with over 1 million songs loaded, and developed a music recommender system for up to 4 users leveraging content-based filtering and cosine similarity techniques.
- Optimized data retrieval by defining indexes on 10+ critical database columns and crafted 5+ efficient view queries to fetch and format required information, improving application performance by 71%.