# Richi Dubey

Phone number: +14703387465 | Email: richidubey@gmail.com | Atlanta, GA, 30318
LinkedIn: https://www.linkedin.com/in/richidubey/ | GitHub: https://github.com/richidubey |
Blog: https://rtemswithrichi.wordpress.com/

## EDUCATION

**Georgia Institute of Technology – Atlanta, GA** *August 2024 - June 2026 (Expected)*
*Master of Science, Computer Science (Specialization: Computing Systems), GPA: 4/4*
*Relevant coursework*: Computer Vision, Deep Learning, Graduate Operating Systems (Teaching Assistant)

**Birla Institute of Technology & Science, Pilani – Goa, India** *Aug 2017 - June 2021*
*Bachelors in Computer Science, GPA: 3.9/4*
*Relevant coursework*: Real-Time System (Top 5/35), Computer Network (A grade), Operating Systems (A grade)

## PUBLICATION

**R. Dubey,** V. Banerjee, S. Hounsinou, G. Bloom, *Strong APA scheduling in a real-time operating system: work-in-progress*, International Conference on Embedded Software (EMSOFT), 2021. [DOI], [Talk], [Poster]

## EXPERIENCE

**CERN (European Organization for Nuclear Research) – Geneva, Switzerland**
*Embedded Software Engineer* *October 2022 – July 2024*

- Built features for a distributed SCADA system called REMUS that interfaces **1000+** diverse sensors deployed in CERN's accelerator areas.
- Developed multi-threaded device drivers in C++ for REMUS, running on SCADA WinCC OA.
- Developed fault-tolerant networking programs for sensors, enabling robust and reliable data communication and reducing downtime to less than **.001%**.

**Oracle – Bangalore, India**
*Software Engineer* *July 2021 – September 2022*

- Implemented new features and fixed production bugs in a multi-tenant application, Oracle Process Automation, with a microservice architecture using Java Spring Boot on Oracle Cloud Infrastructure (OCI).
- Wrote terraform code to deploy Kubernetes infrastructure for the application on the cloud. Deployed these codes across **50+** OCI data centres worldwide and reduced developer involvement by over **30%**.

## OPEN SOURCE CONTRIBUTIONS

**RTEMS – Sponsored by Google Summer of Code** *Summer 2020*

- Contributed 1000+ lines of code to RTEMS for implementing the Strong Arbitrary Processor Affinity (APA) scheduler that allows dynamically relocating higher-priority tasks among processors and improves system schedulability by over **20%**. Published a paper and wrote a blog on the implementation.

## SKILLS

**Programming Languages:** C/C++/C++14, Python, Java, SQL, Javascript
**Tools/Frameworks:** Kafka, MQTT, SpringBoot, Docker, Kubernetes, Git, Jenkins, Linux
**Languages:** Fluent in English and Hindi, Conversational in French

## AWARDS

**Hercules Prize - edition 2019/2020 —** University of Modena and Reggio Emilia, Italy *Feb 2021*
**Google Summer of Code (GSoC) 2020 —** Google *May 2020*