ROSHAN PAWAR

steradian614@gmail.com | +1778-751-4291
https://r614.dev | http://linkedin.com/in/r614/

TECHNICAL SKILLS

- **Languages**: Python, C++14, Java, Javascript, Rust, Kotlin, R, SQL/NoSQL, HTML, CSS.
- **Frameworks:** Flask, Spring, Node.js, Next.js, React, Numpy, Dask, Cython, MongoDB, PostgreSQL, MariaDB.
- **Other**: Linux, Airflow, Azure, AWS, Kibana, Docker, TeamCity, Kubernetes, Terraform.

EXPERIENCE

BOREALIS AI, Machine Learning Software Engineer, Vancouver   May 2021 - Present

- Profiled and optimized feature engineering algorithm for a new RBC product using Numpy, Dask and Pandas by over 50%.
- Developed a ML model monitoring system to generate and analyze artifacts throughout the inference pipeline using Airflow, MLFlow/Prometheus and Python. The system measures model drift, accuracy and other metrics in production.

FISPAN, Software Developer (Platform Team), Vancouver   May 2020 - Apr 2021

FISPAN is a leading fintech start-up developing ERP and cloud solutions for banks like JPMC.
- Generalized monitoring in distributed systems (Spring, Node.js, Kotlin, RabbitMQ, MongoDB, AWS RDS), improved multi-threaded tracing and sanitizing sensitive banking data.
- Developed services and POCs using Spring, Node.js, Terraform and AWS Lambda for secure file-transfers, secrets management and document-level security. Also developed a CLI tool using Rust to manage the build pipeline.
- Reduced costs and latency by 120% by identifying and optimizing slow SQL queries in production using Kubernetes, Kibana, and AWS RDS.
- Participated in monthly on-calls to fix production issues and security vulnerabilities.

CARA, Co-Founder - Software Development Lead (part-time), Vancouver   Jan 2020 - Jun 2021

CARA was a safety mobile-app startup leveraging AI to improve accessibility for safety features.
- **Winner** - Microsoft AI for Social Impact Hackathon, Dempsey Startup Competition (IoT track).
- Finalist at numerous startup competitions (Next 36, QEC etc), raised **$15,000+** in funding through competitions.
- Built a ML inference pipeline for near-real-time audio analysis, and a mobile app using Capacitor and Node.js.

BLACKBERRY, Software Developer (Product Security Team), Toronto   Jan 2020 - May 2020

- Designed and developed a scalable microservices pipeline for bill-of-materials generation and binary analysis using Python, Java, Flask, Docker and SQL Server with integrations with Jenkins.
- The product security pipeline we built is used by BlackBerry's 50+ Products and contributes $10 Million annually.

BC CHILDREN'S HOSPITAL RESEARCH INSTITUTE, Student Researcher, Vancouver   May 2019 - Sep 2019

- First authored a paper on using Simple Logistic Regression ML models for predicting Sepsis in real-time.

PROJECTS

UBC BIOMEDICAL ENGINEERING TEAM, Senior Software Developer, Vancouver   Oct 2020 - Present
- Co-leading the software team developing a glove for Multiple Sclerosis patients for therapy and rehabilitation.
- Implementing an asynchronous data pipeline using Node.js, RabbitMQ, Python and MongoDB.

UBC LAUNCHPAD, Software Developer (Machine Learning Team), Vancouver   Jan 2019 - Jan 2020
- Developed a Markov-chain model from scratch in Python, and worked on GPT-3 integration on the Mimic library.

Note: My full list of projects/extracurriculars/activities is available here

EDUCATION

UNIVERSITY OF BRITISH COLUMBIA, Bachelor of Applied Science Co-op**,** Vancouver   Aug 2017 - May 2022
- Biomedical Engineering major, Bioinformatics track, Computer Science minor
- Outstanding International Scholar Award