

ROMAN HUDAJ

CS Student ~ Software Engineer

🌐 roman-hudaj.com

🌐 github.com/rhudaj

✉ rhudaj@uwaterloo.ca

in /in/rhudaj

SUMMARY

Dynamic, agile full-stack software developer with rapid adaptability to emerging technologies, a keen aptitude for grasping intricate concepts and solving problems with automation and data science.

SKILLS

Languages: Python, Golang, SQL, JavaScript, TypeScript, Java, C++, C, HTML, CSS
Technology: Git, Docker, MongoDB, Apache Spark, PyTorch/Numpy/Pandas, GCP, Alteryx

EXPERIENCE

4/23 - 9/23 **Software Product Management Intern**

Environics Analytics

- Developed an automated pipeline with Alteryx and the API of an Deep Learning model to parse and translate data product documents and variable lists to French, resulting in savings of tens of thousands per product.
- Created a user-friendly app with Python and Microsoft SQL Server to extract client usage data of company products from databases; provided ease of data access and analysis by non-technical teams.
- Enhanced databases in SQL Server to monitor client usage of products/APIs to formulate an optimized product pricing strategy and ultimately increase profitability and user satisfaction.

SQL / Python / Alteryx / Azure DevOps

5/24 - 9/24 **Software Product Developer**

Timeplay

- Improved UI for lottery and instant-win games through market-research and development with React and TypeScript, supporting the rollout of a mobile-gaming platform on cruise ships from inception to deployment.
- Optimized data structures, architecture and APIs across backend-services, reducing data redundancy and enhancing usability improving performance of tools used by the end-users; admins on cruise ships.
- Prioritized and deployed new game features based on client/user feedback, coordinating with stakeholders ensuring timely updates, and with developers using Jira which resulted in a 30% increase in game engagement.

Node / Docker / React / MongoDB / Golang

1/22 - 8/22 **Student Engineer**

Martinrea International

- Spearheaded a major project to optimize the flow of materials across a large facility; improved system for collecting and analyzing data to plan the project; resulted in increased output and cost efficiency.
- Implemented a supply chain tracking system using Apache Spark, SQL & ETL Warehouses for proactive identification of issues, enabling timely alerts to managers and achieving estimated \$11,000 annual cost savings.

SQL / Apache Spark / ETL / Excel

PROJECTS

5/24 - 9/24 **Automated Restaurant Reservation Business**



Fully automated system to secure sought-after reservations at world-famous restaurants for clients, generating \$X,XXX a month // Developed with TypeScript and Node.js // Deployed on Google-Cloud and managed through their REST API, utilizing Scheduler for automated tasks, Task Manager for executing parallel API requests to reservation-platforms, and cloud-storage for saving transaction and listing records, ensuring a scalable and reliable system.

TypeScript / Node / Google Cloud (GCP)

8/24 - Pres **Job Application Tool**



Developed a full-stack app with React, TypeScript and Express that streamlines the job application process // The frontend features interactive tools to create, edit, and save tailored resumes dynamically, enhancing the efficiency and personalization of job applications // A backend exposed as a RESTful API with Express, stores templates and connects to an NER model that extracts key information from job descriptions.

Python / React / TypeScript / Express

10-12 / 24 **Distributed Email Spam Classifier**



Developed a spam classification system using Apache Spark. Implemented and optimized stochastic gradient descent (SGD) to on 1GB+ datasets, utilizing hashed byte 4-grams as feature vectors, distributed Spark programs to preprocess training data, train models, and make predictions, ensuring scalability and efficient memory usage // Evaluated performance using ROC metrics, achieving a competitive area under the curve (AUC) score.

Apache Spark, Scala

EDUCATION

9/20 - 12/24 **Computer Science, Honours**

University of Waterloo

- Awards: Presidents Scholarship of Distinction, Dean's Honours List
- Course-Work: Algorithms, Databases, AI / Machine Learning, Software Engineering