

# ROMAN HUDAJ

CS Student ~ Software Engineer

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## SUMMARY

Versatile full-stack software developer skilled in quickly learning new technologies and solving problems through automation and machine learning. Experienced in modern frontend and backend languages/frameworks and working with APIs.

## SKILLS

**Languages:** Python, Go, SQL, JavaScript, TypeScript, C++, C, HTML, CSS  
**Technology:** React, Node, Git, Docker, NoSQL(MongoDB), Alteryx, SQL Server, Numpy/Pandas/PyTorch

## EXPERIENCE

04/22-09/23 **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.
- Redesigned NoSQL schemas to eliminate redundancies and improved architecture and APIs for backend services in Go, enhancing clarity for developers and boosting performance and reliability of tools used by end-users.
- Deployed new features for web and mobile lottery games by interviewing clients/users, guiding developers and updating stakeholders with CI/CD tools (Jira, Docker), resulting in a 30% increase in game engagement.

Node / Docker / React / MongoDB

04/23-09/23 **Software Product Management Intern**

**Envionics Analytics**

- Built an adaptive French translation pipeline using Alteryx, SQL, and a deep learning AI model API to automate data product and document translations, resulting in ~\$40K in savings per product translation.
- Built a desktop app with Python to extract, filter and export client product-usage data from SQL Server databases featuring intuitive UI & efficient processing; used by non-technical teams for data analysis.
- Enhanced databases to track product/API usage and formulate data-driven pricing strategies; conducted research with product owners and users to identify key "usage" variables, increasing profitability and user insights.

SQL / Python / Alteryx / Azure DevOps

01/22-08/22 **Student Engineer**

**Martinrea International**

- Co-lead a major project to optimize the flow of materials across a automotive manufacturing plant; improved system for collecting and analyzing data to plan the project, increasing overall output and cost efficiency by 30%.
- Built a supply chain monitoring system with ETL analysis on data warehouses using Apache Spark and SQL to track supply and demand, sending timely alerts for potential shortages or surpluses, resulting in \$10K+ annual savings.

SQL / Excel / Apache Spark

## PROJECTS

05/24-Pres **Automated Restaurant Reservation Business**



- Founded a service that secures reservations at world-famous restaurants with Go(lang), generating ~\$3K/month.
- Deployed to Google-Cloud utilizing Scheduler for automated tasks, Task Manager for distributed execution and cloud-storage for saving user and transaction data.

Go / Google Cloud

09/24-Pres **Job Application Tool**



- Created a full-stack web-app that streamlines the job application process.
- Built a frontend with React/Redux featuring interactive tools to edit, and save resumes, enhancing personalization.
- Created a backend with Python that features a machine learning pipeline for analysis of job descriptions.

React / Redux / Node / TypeScript / Python

01/24-04/24 **Voice-to-Instrument**



- Developed a desktop app enabling real-time translation of human voice into various musical instruments.
- Implement probabilistic algorithms with Python (Numpy, Pandas, PyTorch) for detection of pitch, tempo, etc.
- Exposed the backend as a REST API to integrate with a GUI built with React.

Python / React / Express

## EDUCATION

09/20-01/25 **Bachelor of Computer Science, Honours**

**University of Waterloo**

- Specialization: Software Engineering
- Awards: Presidents Scholarship of Distinction, Dean's Honours List
- Courses: Databases, UI/UX, Data Structures and Algorithms, Artificial Intelligence (AI), Machine Learning