

# ROMAN HUDAJ

CS Student ~ Developer

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## SUMMARY

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

## SKILLS

**Languages:** Python, SQL, JavaScript, TypeScript, C++, C, HTML, CSS

**Technologies:** ReactJS, NodeJS, Git, Alteryx, SQL Server, MySQL, Numpy/Pandas/Selenium, Excel

## EXPERIENCE

4/23 - 9/23

### Software Product Management Intern

Environics Analytics

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

SQL / Alteryx / Python

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 SQL and advanced Excel for proactive identification of issues, enabling timely alerts to managers and achieving estimated \$11,000 annual cost savings.
- Led cross-functional meetings to communicate project progress, timelines and outcomes to various departments and management.

SQL / Power BI / Excel

## PROJECTS

Python, SQL

### Database Interface App



Created a efficient, user-friendly app to interact with a database featuring: Connection to any specified database via ODBC, dynamically generating intuitive UI for table selection and data filtering // real-time selection-based querying, efficiently handling millions of records via Pandas, optimized display algorithms and batch querying // thread and crash safe via multi-threading // MVC architecture.

Python, ReactJS

### Real-Time Voice-to-Instrument Translator



Developed an app enabling real-time translation of human voice into various musical instruments // Utilized Python (Numpy) to implement advanced probabilistic algorithms for detecting: pitch, tempo and note-onsets // Exposed the backend as a REST API to integrate with a custom GUI // Achieved accurate and efficient translation with a seamless user experience.

ReactJS, NodeJS

### Note Taking, Web-App



Developed a comprehensive note-taking web application with React / Typescript // Integrated with MongoDB's REST API for efficient file storage in server-side databases // Researched and tested innovative features aimed at enhancing the user experience of the note-taking.

## EDUCATION

9/20 - 12/24

### Computer Science, Honours

University of Waterloo

- Pursuing Specialization in Data Science.
- Awards: Presidents Scholarship of Distinction, Dean's Honours List
- Course-Work: Object-Oriented Software Development, RDBMS, Database Design, UI Design, Web Development, Algorithms, Testing, Optimization

## INTERESTS

Personal

Hackathons, 3D Artwork and Design

Volunteering

UHN - Hospital Patient Support (2 years), Student Teacher (3 years)