Thien Dan Balsdon

Computer Engineering · **University of Waterloo**

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About Me

Programming	C++/C · Python · Java · JavaScript
Analytics	SQL · PowerBi/DAX · Alteryx
Web/Media	Django · HTML/CSS
Tools	Azure · AWS

Experience

Genellipse   Remote, ON
AI/ML Data Scientist   Jan. 2022 - Apr. 2022

- Created and improved financial reports for client club transactions, improving data accuracy by providing real-time updates through Power Bi, DAX and Alteryx
- Researched insurance policies and utilised predictive modelling to create real-time used cases for different situations
- Tested and implemented end-to-end AI and data ETL models, for data visualisation in the financial reports to display member spending trends
- Presented and implemented cloud computing with AWS and Azure to company head for intern project, incorporating advanced Python code with 1+ intern to automate the data refresh of the reports
- Incorporated cloud computing to the financial reports, saving clients ~85% annually in licensing costs and reduced application runtimes by %90

UW Engineers Without Borders   Waterloo, ON
Developer   Sept. 2021 - Dec. 2021

- Redesigned the Wazi website to increase user base and retention rates to >80%
- Developed the frontend applications for the Wazi website using modern HTML, CSS and JavaScript
- Increased organic traffic to 5 min/month by improving site architecture through the implementation of a shallow navigation structure

Projects

Retrieving Historic Weather   Python   Feb. 2022 - Mar. 2022

- Generated atmospheric data for user imputed locations using api calls to the World Weather Online database
- Programmed software bots to collect user specific data to generate and analyse weather trends
- Integrated insightful logging during the data collection process, to provide real-time updates on the progress

Web Scraping Bot   Python   Jan. 2022 - Mar. 2022

- Created a web scraping bot in Python using the Selenium library to automate the vacation booking
- Generated user inputs to schedule flights and hotels to specified destinations and date range
- Programmed an application to utilise a chromedriver to increase booking efficiency by 90%

Morse Code Puzzle   C, STM32 Microcontroller   Feb. 2022

- Designed and built a multi-effects controller
- Utilised an analog circuit board to be used in conjunction with microcontrollers to produce visual effects such as LCD screens and LED light bulbs
- Programmed a STM32 microcontroller using C to switch between the ordered visual effects

Education

University of Waterloo   Waterloo, ON
Bachelor of Applied Science, Honours Computer Engineering Co-op   Sept. 2021 - Apr.2026