Jesse Ren
Engineering Student

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Employment

Economical Insurance
Access Analyst   Sept. 2019 to Dec. 2019

- Developed SQL scripts to delete, retrieve and change broker data
- Saved my team over 100 hours of work by writing a VBA script to automatically create audit reports in Excel
- Regularly participated and contributed to daily team standups, allowing for better team communication and project understanding

University of Toronto Scarborough
Engineering Assistant (Facilities)   Jan. 2019 to Apr. 2019

- Developed VBA and Python scripts to format, clean and calculate heating and cooling loads from university HVAC data files
- Designed an accessible user interface that allows selection of individual heating/cooling loads within specific time ranges
- Created a comprehensive data visualization tool using Python displaying HVAC data in Time Series
- Contributed to the creation of a proposal to reduce the University's greenhouse gas emissions by modelling campus energy loads

Projects

2-D Shooter
Mar. 2018 to June 2018

- Developed a game including features such as projectile motion, hit detection and enemy movement patterns using Java
- Implemented several visual, audio and user interactive features
- Coordinated and divided up tasks with team in order to achieve maximum efficiency

Earth Engineering Case Study
Apr. 2019 to Aug. 2019

- Conducted a case study to improve Cambridge's flood management system by implementing an extension to its diking system
- Analyzed site conditions and soils in order to design an earthen dike with appropriate dimensions and materials to prevent flooding
- Compiled findings into a case study report as a project manager, complete with a Gantt chart and budget

Skills

PROGRAMMING
- Java
- Python
- SQL
- JavaScript
- CSS
- HTML
- VBA
- MatLAB

MICROSOFT OFFICE
- Word
- Excel

DESIGN
- AutoCAD 2018
- Civil3D

Education

Sept. 2018 to Apr. 2023

University of Waterloo
Candidate for B.ASc Environmental Engineering