Ming Chen

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SKILLS

Languages: C++, C, Python, JavaScript, SQL, HTML/CSS, Bash
Tools & Technologies: Git, Docker, MySQL, Django, React/Redux, TensorFlow, Jira

EXPERIENCE

Security Compass   **June 2021 – August 2021**
Software Engineering Intern – Toronto, ON
- Wrote **bash scripts** to automate a 32 step procedure to process and support **CRUD** operations for thousands of content modules, **freeing 10+ hours of weekly workload** from non-technical teams and drastically reducing content upload time.
- Utilized **Django REST framework** for back-end, and **React framework** and **Redux** for front-end to develop explainable mapping features on the SDElements application (Security Compass's flagship enterprise product), where users would get information on why certain security policies showed up for their projects.
- Improved SDElements' test coverage by writing back-end tests using **PyTest** and front-end tests using **Gherkin** with the **Cypress framework.**
- Participated in an **Agile Scrum** development cycle and performed code reviews to engineer complex solutions.

PROJECTS

ChamberCrawler3000 | C++, Ncurses   **December 2021**
- A terminal-based twist on the traditional dungeon crawler–you play as a monster whose home has been invaded by pesky adventurers! Written in **C++** and featuring a graphical display made using the **ncurses library**.
- Designed according to the **MVC model**, various **Design Patterns**, and the **SOLID principles** of object-oriented design.

Tweeter | TensorFlow, Keras, Pandas, Tweepy API   **September 2021**
- Tweeter is a **dynamic character language model for Twitter**. Given a Twitter user handle, it will generate fake tweets that sound just like them. It utilizes Twitter's **Tweepy API** to grab approximately 3000 tweets per given user to generate a **Keras** training model.
- Utilized model with 4 Bidirectional LSTM Layers, Batch normalization and Drop outs to prevent overfitted data and to ensure the numbers remain normalized.

EXTRACURRICULARS

City of Toronto Care Homes Volunteer Youth Council   **June 2018 – August 2021**
President
- Lead 500+ student volunteers in over 35 events and initiatives across the City of Toronto's public care homes.
- Spearheaded the tablets-for-seniors fundraising campaign; successfully raising thousands of dollars to purchase multiple tablets for each care home.

EDUCATION

University of Waterloo | 3.84/4.00 GPA   **September 2020 – April 2025**
Bachelor of Computer Science (Honours Co-op)
- President's Scholarship of Distinction, Dean's Honours List (all semesters)
- Relevant Coursework: Object-Oriented Software Development, Sequential Programming (Compilers), Data Structures and Data Management, Computer Organization and Design