Timothy Chen

Software Engineer
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Skills

Languages: Java · Python · JavaScript · Golang · C · C# · SQL · HTML/CSS · Swift
Frameworks & Libraries: React · ReactNative · Flask · RASA · Docker · .NET
Developer Tools: Git · VSCode · VisualStudio · Eclipse · Confluence · Jira

Education

McMaster University — Hamilton, Canada
Bachelor of Engineering and Management in Software Engineering — *August 2017 – December 2023 (Expected)*

Experience

Software Developer — January 2022 – December 2022
Royal Bank of Canada — *Toronto, Canada*

- Conducted research and gathered requirements to improve the natural language understanding capabilities of an existing **RASA** chatbot framework specialized in understanding requests for network
- Successfully redesigned the chat-bot framework, enabling it to hold meaningful conversations with employees and understand their network requests, resulting in it being used by over 100 active users
- Repaired an existing monitor script in **Python**, implementing a system that will push network details to confluence and improve ease of access for network teams by 80%

Undergraduate Teaching Assistant — September 2021 – December 2021
McMaster University — *Hamilton, Canada*

- Organized 4 interactive tutorials which taught concepts related to parallel programming, with a focus on optimizing benefits and preventing race conditions
- Graded and provided feedback on over 300 assignments and exams, evaluating students on key theories and techniques from the course
- Created programming questions in a range of languages (**Python**, **Java**, **C**, and **Golang**) to expose students to different methods and techniques used in each language

Technical System Analyst — May 2021 – August 2021
Royal Bank of Canada — *Toronto, Canada*

- Implemented test automation processes using **Blue Prism** to verify returned metrics and ensure the availability of web services after updates
- Reduced the need for manual labor in server monitoring and file removal tasks by automating it in **Ansible** playbooks using **YAML**
- Planned and produced an introduction video, as well as written documentation, to familiarize other teams and clients with the services provided by the team

Automation Developer — May 2020 – August 2020
Nokia — *Ottawa, Canada*

- Developed a new test bed to automate manual test cases that measured over 20 exposed metrics provided by internal network services
- Revamped existing test scripts to verify returned messages for corresponding events from POST request calls made against the network
- Modified scripts written in **Python** and wrapped in a **Perl** script, which ran in an internal regression framework, to verify the correctness of network messages

Application Developer — January 2020 – April 2020
Beth Tikvah — *Hamilton, Canada*

- Designed and implemented a user-friendly scheduler interface using **VBA**, which streamlined and synchronized all care home schedules and reduced errors by 90%
- Efficiently reduced time spent on manual updates by 80% and eliminated the need for care home managers to cross-reference multiple schedules, through the implementation of an algorithmic scheduling solution
- Successfully implemented an algorithmic solution that ensured a caregiver was always present every hour, receiving 100% positive feedback from users