Andi Fan

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Current University of Toronto computer science student and Transport Canada Junior Data Scientist. Interested in software security, systems programming, and software development. Always excited about new opportunities to learn, and currently seeking a software development role.

Education

Computer Science (Honours, BSc)
University of Toronto, *2017 – 2022 (Expected)*

Soft Skills

Teamwork and collaboration, problem solving, creativity, research and analysis, time management, project management, quick learner, resourceful

Software Tools

Programming Languages
Python, Java, C++, C, Assembly Language, SQL, Shell scripting (Bash), JavaScript, jQuery, PHP, HTML, CSS

Platforms
Git, Excel, Word, Visual Studios, GNU Debugger, Valgrind Memory Debugger, JUnit Testing, PowerBI, SQL Server Management Studios

Experience

Junior Data Scientist   Ottawa, ON
Transport Canada, *Aug 2020 – Present*
- Communicated with clients to clarify business objectives
- Presented recommendations to team regarding deliverables and data collection
- Worked with Navigation and Protection Planning team to organize and clean large sets of data
- Collaborated with team members to perform descriptive analysis on large sets of data

Web Developer
Cause for Paws (UTM), *Aug 2020 - Present*   Mississauga, ON
- Consulted with client to determine needs and functionality
- Coded back-end of website with front panel MVC framework in mind for future extensibility
- Collaborated with team to code and design front-end of website

Projects

Custom Kernel Module
- Created and installed custom Kernel Module on RedHat72 VM
- Create new custom system call that replaces pre-existing system calls in the syscall table
- Logs information about system call replaced, and the calling process
- Allows users to monitor specific processes, and alter behaviour of custom syscall for any given process

Multi-Game Website
- Website stores Account information and player stats in database
- Website has frontend and backend validation, prevents cross site scripting and SQL injection
- Website implemented with front-panel MVC framework
- Games include alternative implementations of Mastermind, Peg Solitaire, and 15 Puzzle

Isometric View survival game
- Front-end uses JavaScript/HTML/CSS, back-end uses Node.js, member management handled with SQLITE3
- Dynamic UI using jQuery to hide/show overlays when needed
- Application follows REST guidelines, user requests sent with jQuery AJAX requests
- Website has frontend and backend validation on login with password hashing