Phone: 226-606-1886

Email: r7pan@edu.uwaterloo.ca GitHub: github.com/robin-pan Website: robin-pan.com

SKILLS

Proficient

C, C++, Python, Bash, HTML, CSS, JavaScript, PHP, AngularJS, JSON, REST, Scheme, MIPS Assembly

Familiar

Java, C#, JQuery, Bootstrap, Laravel, Node.js, SQL, SDL, WebdriverIO, Mocha, Chai

Tools

Git, Linux, Windows, Vim, Sublime, Visual Studio, Eclipse, Oxygine, LaTex, Docker, Nginx

Other

Agile development, object-oriented programming, data structures and algorithms, compiler design, database design, discrete mathematics, quality assurance, technical writing

EDUCATION

University of Waterloo

Candidate for BCS 2015 - 2020 (Ongoing)

ACHIEVEMENTS

Dean's Honours List, uWaterloo **Term Average 87%+** Winter 2016

Presidents Scholarship, uWaterloo Entrance Average 90%+

Fall 2015

Bronze Medallion, National Lifeguard Society **Awarded upon completion of second step towards lifeguarding certification** Fall 2013

ARCT Diploma in Performance, RCM *Pinnacle of achievement within the Music Development Program*

Summer 2013

4th Place, Canadian Music Competition **National Finals**Summer 2012

Patricia McLean Scholarship, RCM Highest grade 8 mark across Canada Summer 2008

Robin Pan SOFTWARE DEVELOPER

WORK EXPERIENCE

Mercury Mortgages | Mississauga, ON, Canada | Sept 2017 – Dec 2017 *Full-Stack Developer*

- Designed and implemented features of web-based mortgage lending platform using AngularJS, Bootstrap, JQuery, Laravel PHP and PostgreSQL
 - Implemented user roles feature to control website access based on user permissions
 - o Wrote a customized directive to control user view based on user permissions
 - Wrote back-end policies to block unauthorized requests
- Implemented various security features
 - o Limited failed password attempts by IP and email combination
 - Added password strength enforcement
 - Fixed various bugs and vulnerabilities
- Maintained and improved PDF generation feature
 - Improved PDF generation time by ~30%
- Decreased loading time of main page from 8+ seconds to 2 seconds
- Other tasks included code reviews, scrum meetings, creating documentation pages, various smaller-scale features, bug-fixing, and helping fellow co-workers debug and solve problems

Ciena Corporation | Ottawa, ON, Canada | Jan 2017 – Apr 2017 Photonics Software Designer

- · Developed tool for analysis of network card logs using Python
 - Designed generic tool for log analysis based on requirements gathered from multiple teams
 - Examined sections of card firmware source code to determine error conditions
 - Created unit-test suites
 - o Wrote technical document outlining the requirements and usage of the tool
- · Performed maintenance tasks on network cards

Climax Media | Toronto, ON, Canada | May 2016 – Aug 2016 QA Analyst

- · Developed and executed test suites for websites following the agile development process
- · Performed manual front-end testing on websites
- Wrote test scripts using WebdriverIO with Mocha and Chai for front-end of websites
- Worked with DB2 database as well as Honda API for manual website back-end testing
- Wrote basic JavaScript scripts for website back-end testing

PROJECTS

Snek

C, C++, SDL, Oxygine, Emscripten

- · Parody of the real-time arcade game 'Snake'
- Initially implemented with C and SDL, switched to C++ and Oxygine
- Employed object-oriented design patterns (subject-observer and singleton)
- Embedded on website after transpiling C++ to Javascript using Emscripten
- · Gained insight on how real-time games work

Personal Website

HTML, CSS, Javascript, JQuery

- · Responsive website with tablet and mobile support
- Minimalistic, single-page design featuring JQuery animations

Calculator

C#

- Basic arithmetic calculator implemented with object-oriented paradigm
- Uses Shunting-Yard algorithm to convert expression to postfix format, then evaluates the
 expression
- Operations are set up polymorphically, allowing for the easy addition of new mathematical operators.