

Alisa Tkaczyk

BSc. Computer Science Honours, Minor in Psychology

Carleton University, (Expected) December 2016

atkaczyk.github.io • 613-700-5269 • alisa.tkaczyk@carleton.ca

Professional Experience

Real Programming for Kids – Video Game Programming Instructor

May 2015 (15 months)

- Educated children between the ages of 7 and 17 on fundamental programming concepts in languages such as Alice 2.0, C#, Visual Basic and Java to develop usable video game projects.

Projects & Acquired Technical Skills

Building Mental Models of Usable Security – JavaScript, Raphael, JQuery & user study.

- Designed an interactive interface and performed a user study to evaluate its efficacy in teaching browser security and related computer security concepts.

Sudoku Solver – Java, applied AI algorithms, formal evaluation report & demo presentation.

- Created a Sudoku solver to test the efficiency of simulated annealing and genetic algorithms and their varied effectiveness in solving Sudoku boards within a range of difficulty.

Ivanhoe – Java, SDLC, design patterns, GUI dev, JUnit testing, agile methodologies & teamwork skills.

- Developed the GUI and documentation for a networked card game as the group lead in a team of three. The project was graded based on use of design patterns, specific diagrams used to assist in development and testing.

CrimHub – HCI, requirements gathering, Balsamiq, user analysis & usability inspection.

- Built and tested interfaces of solutions for Criminology students to access their audit and easily manage timetables upon registration. Inclusive of design, modification and testing of mockups and prototypes over multiple iterations.

Hacking the Linux Kernel – C, Bash, code review & progress documentation.

- Inspected the Linux kernel and discovered the source for a variety of function calls, worked in depth with the sleep and ls command source code. Successfully modified the ls command to randomly return comedic phrases.

Other languages (limited)

& where I practiced them

Intro to Software Engineering – C++

Database Management – SQL

Programming paradigms – Dr. Racket, Scheme

Artificial Intelligence applications – Python

Web development – HTML5, CSS3, Node.js

Leadership & Extra Curricular

Microsoft Coding Competition October 2016

lot613 Volunteer September 2016

Board of Directors May 2015 (8 months)

GoCodeGirl March 2015

Varsity Rowing August 2013 (12 months)

Software Developer with soft skills.