






ALEX MADRZYK

Western University — Honors B.S. Computer Science

 alexmadrzyk.me
 alexmadrzyk@gmail.com
 amadrzyk
 alexmadrzyk
 519-639-9061

Coder for **5 years**. **50,000+** lines written in **10+ programming languages**. **9x** award winner.

Honors student with a **3.98 GPA**. Incoming summer **software engineering intern** in Seattle. **Web and software** developer.

TECHNICAL SKILLS

Tools/Frameworks: Eclipse, Xcode, PhpStorm, AdobeCC, jQuery, Git, Heroku, UNIX/Terminal, Bootstrap, NodeJS

Languages: Java, C, Python, HTML5, CSS3, JavaScript, Swift, Bash, SQL, PHP, Arduino

LEADERSHIP

Berkeley Invention Corps  *mentor*

- Led weekly meetings teaching Berkeley students about web development + design

Western French Club  *VP technology*

- Implemented several member engagement initiatives and managed online club activity

AWARDS

Best Hack to Improve Patient Wait Times – awarded for *TimeToCare* project at Hack Western

Magnet Forensics: Cracking the Code Challenge, Third Place – *digital decryption challenge finalist*

Bloomberg LP: PennApps Logic Challenge, First Place – awarded for the *quickest solution to the challenge*

Queen Elizabeth II Silver Jubilee Endowment Fund – *only student nominated by the university, and one of three students in Canada to win the award. Selection based on academics, leadership roles and volunteering*

Robert and Ruth Lumsden Scholarship in Science – awarded for *outstanding academic achievement*

Scholarship of Excellence, Student of Distinction, Western Scholars, Dean's Honor Roll, 2014–Present

EDUCATION

Western University  **2014–2019**

- Honors Double Major: B.S. in Medical and Computer Science
- Fall 2016 GPA: 3.98/4.00

Harvard Extension School  **Sep. 2016 – Dec. 2016**

- Comprehensive overview of Computer Science, including algorithms, security, and resource management

University of California, Berkeley  **Jun. 2016 – Aug. 2016**

- Intensive eight-week summer sessions. Studied computer architecture, low-level programming and analysis of big data principles

EXPERIENCE

Developers' Foundation  *Web Developer* **Oct 2016 – present**

- Translated non-profit organizations' design proposals into fully-responsive and user-friendly websites
- Built webpage components from scratch using HTML/CSS and JS, and created web applications using PHP, MySQL, and ClearDB
- Designed click-and-run full-stack web templates for new developers, reducing time from concept to release phase

Western University  *IT Tech Support* **Aug 2016 – present**

- Expanded office hours to 2x a week to help students and faculty with computer and digital equipment-related issues
- Collaborated with the Dean of the Faculty of Music by assisting in classes and workshops about technological integration in education for graduate students

PROJECTS

Achi AI – Java  **Nov. 2016**

- Created a virtual computer player to beat human players in Achi
- Implemented artificial intelligence by using dynamic optimization to evaluate potential moves based on the current game state

TimeToCare – HTML, CSS, JavaScript  **Oct. 2016**

- Developed a website that decreases patients' wait time in hospitals by an estimated 35% by using a high-level stratification design
- Wait time is reduced by directing patient streams to different hospitals based on average wait times at nearby emergency rooms and travel times calculated using the Google Maps API

3D Depth Map Optimization – C  **Aug. 2016**

- Optimized an image depth-map generator by using OpenMP to multithread the code, and Intel SSE intrinsics to perform 4 operations per CPU cycle, resulting in an average of 6x speedup

Twitter Sentiment Analysis – Python  **Apr. 2016**

- Developed a program that parses tweet data from each US time zone, and performs sentiment analysis to rank each one by its level of happiness

ACTIVITIES

Microsoft Coding Challenge • PennApps XV • HackWestern 3 • McHacks Western Cyber Security • Western Hack Team