

ANDREW LIU

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SKILLS

Languages: Java, Python, HTML/CSS/JavaScript, C, Racket (Scheme)

Tools: Linux, Git, Node.js, Vim

PROJECTS

TigerLaunch Mobile App, JavaScript

- Developed a mobile application prototype using React Native for the TigerLaunch entrepreneurship competition
- Built interface for users to discover and exchange interests and hobbies with others
- Used Redux to efficiently manage the application state tree
- Created login screen, using Firebase for user authentication
- Implemented profile and messaging screens

HTML5 Canvas Mario Game, HTML/CSS/JavaScript

- Created a Super Mario Brothers clone using ES6 JavaScript, Brunch build tools and the Phaser game library
- Implemented touch controls to maintain compatibility with mobile devices

Dijkstra's Algorithm Pathfinder, Java

- Wrote a program to navigate a grid and collect points in a class competition
 - Used Dijkstra's algorithm to find the optimal path in the grid maze
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EXPERIENCE

High School Senior Project

August 2016 - April 2017

Instructor for 20 grade school students

- Organized, planned, and taught concepts such as conditional logic and game design using Berkeley's Snap! programming language

Minds on Math

August 2015 - December 2015

Math tutor for 15 students at Lillian Schmitt Elementary School

- Helped students with assignments after school
 - Explained and clarified math concepts learned in class
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EDUCATION

University of Waterloo, Honours Computer Science

September 2017 - Present

3.94 GPA: Fall 2017 Dean's Honours List

Current Coursework:

- CS 146: Elementary Algorithm Design and Data Abstraction (Advanced Level)
- ECE 493: Autonomous Vehicles

Columbus North High School

August 2013 - May 2017

- National AP Scholar
- Academic Letter Award