

William Hsia

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14 Stockwell St, Boston, MA, 02120

EDUCATION

Northeastern University, Boston, MA January 2020 - May 2023

Computer Engineering and Computer Science, GPA 3.495

Coursework: Embedded Design, Circuits and Signals, Discrete, Cybersecurity, Linear Systems, Digital Design, Networks, Computer Science I & II, Object Oriented Design, Algorithms & Data, Database Design, Logic & Computation

Activities: IEEE, SASE, Data club

American College of Thessaloniki, Thessaloniki, Greece September - December 2019

Semester abroad through N.U.in

Activities: Volleyball team

SKILLS

Electronics: Arduino, 3D printer, circuit design, DE1-SoC, RFID, digital multimeter

Programming: Java, JavaScript, C++, Matlab, Python, Racket, MySQL, React, HTML, CSS

Software: AutoCAD, Microsoft Office, Solidworks, PSpice, macOS, Windows, Linux

Languages: Italian, Mandarin, Spanish

PROJECTS

Software April 2019 - Present

- Personal Website: Created, developed, launched, and managed my personal responsive website at [Williamhsia.com](#). Built using the fundamentals of web development: HTML, CSS, and Javascript
- Image Processing: Interactive GUI made with Java and Java Swing that lets the user upload, modify, and save multiple images
- Freecell: Using Object-Oriented Design principles to code the game of Freecell that shuffles and distributes a full deck of cards and lets the user play the game
- Maze Game: Randomly generates a maze using Kruskal's algorithm which can be solved automatically with both Depth-first search or Breadth-first search and shows the shortest path to the endpoint
- FloodIt: Enforced coding fundamentals and helped me think outside of the box to effectively work around problems such as design choices and time complexity
- Tetris: Quickly grasped new concepts and applied them without fail

Card Reader April 2020

- Took the leadership role in a group of 4 people to successfully create a prototype of our project
- Used RFID tags to read multiple cards and give the appropriate output for each card
- Coded and built using Arduino