

Madison Wang

maddiew@stanford.edu | github.com/maddie-wang | [linkedin.com/in/maddiewang](https://www.linkedin.com/in/maddiewang) | Stanford, CA

EDUCATION

Stanford University 2017-2021

B.S. Computer Science (in progress)

Year 1 Coursework:

CS 106b: Programming Abstractions

CS 107: Computer Organization & Systems

CS 109: Probability for Computer Scientists

CS 103: Mathematical Foundations of Computing

Math 51: Linear Algebra and Multivariable Calculus

CS 110: Principles of Computer Systems

Wharton & Penn Engineering, University of Pennsylvania July 2016

Jerome Fisher's Management & Technology Summer Institute | Course: *Technology, Innovation and Venture Development*

Mounds View High School 2013-2017

12+ AP courses | ACT: 34 | UW GPA: 3.961

Related Coursework: Multivariable Calculus, Linear Algebra, AP Computer Science, AP Physics C (M&E)

Notable Awards: National Center for Women and Info Tech: 2017 National Award for Aspirations in Computing (Top 1.4% of 3,500+ Applicants); Junior Achievement Company Nationals: EY Social Innovation Award, National Finalist

PROFESSIONAL EXPERIENCE

Medtronic — Software Engineer Intern

June 2017 - August 2017

- Developed Excel software which will save Medtronic \$400,000+/year (2 FT) by optimizing the data collection & lab testing process
- Gained practical knowledge of product development life cycle by bringing an idea from concept to prototype
- Gathered user needs from engineers & other potential users of the prototype & materialized user needs into Excel Macro functions & features. Performed cyclic code reviews & implemented feedback during development
- Developed documentation suite for macro installation. Trained 60+ people on installation & use of the macro. Languages used: VBA

WatchItBand LLC — Founder

July 2016 - Current

Sexual assault prevention wearable. Can send texts for help or call to police. Incorporated, provisional-patented, pending release.

- Developed front-end and back-end for company website
- Engineered working MVP prototype with Arduino; created app mockups; designed the user interface for Android app
- Conducted market research & compiled business plan. Currently provisional patented & planning a 2018 release & gofundme

Cheesium — CEO and founder

July 2012 - August 2015

Minecraft Multiplayer Server that was first ran off laptop & grew into a 5-figure startup

- \$61k Revenue. \$39k Profit.
- Individually managed hardware investments (*ddos-protected 64GB Intel Xeon E5 E5-1620v2*), software (CentOS, coding java plugins), and ingame mechanics (buildings, gameplay, ranks, player-retention) of a 3,000 userbase Minecraft server
- Managed investments and advertisements up to \$1,700 and partnered with famous Youtuber JeromeASF (4.3+ million subscribers)

PROJECTS

Programming

2012 - Current

- MS Word → Excel → XML converter (VBA)
Algorithms coded: Permutation system, MS Word custom regex, vector matching, & export multiple files. 3000+ lines
- Gaussian Elimination (Python)
Programmed Linear Algebra algorithm that solves a system of linear equations of any magnitude
- C++ Projects: Fauxtoshop, WordLadder, NGrams, Fractals, Grammar Solver, Boggle, Huffman Node, Trailblazer
- Redesigned & mobile optimized *Piccadilly Prairie's* checkout software UI: [Before](#) and [After](#). (HTML/CSS/Bootstrap)

Web Development

2012 - Current

- 13 websites developed including: maddiewang.com, impactmed.org, watchitband.com, mvmagazine.org, maihoasalon.com, chaosalterations.com, rosevillepolicefoundation.org. Web design: [Portfolio link \(imgur.com/a/Y8Vgu/\)](#)

Leozarb — CEO and founder

April 2015 - July 2016

Spanish App for middle schools; website development for immigrants & low-income families

- Prepared company presentation, commercial, & business plan. JA Comp. National Finalist & "EY Social Innovation Award"

SKILLS

Proficient in:

- Java, C++, C, Unix, VBA, HTML/CSS

Experienced in:

- Python, SQL, JS, PHP

Concepts applied: Graph Theory, Stacks, Queues, Trees, Linked Lists, Hash Tables, BFS/DFS, BST, Sorting, & Big-O Notation

EXTRACURRICULARS

Stanford

- Stanford Solar Car, Women's Club Rugby, chamber orchestra, tennis, kitchen manager, & SWE
- Conferences: O4U Engineering, NCWIT National conference, speaker at Women Leading in Technology conference

Mounds View High School

- Tennis (varsity captain), district art & lit. magazine (editor in chief), viola, social justice club (founder), art, entrepreneurship