

# Jennings Zhang

BIOMEDICAL SCIENCES · COMPUTER SECURITY

11124 Potomac Oaks Drive Rockville, MD 20850 USA

☎ +1 (240) 401-8226 | ✉ jenni\_zh@protonmail.com | 🌐 <https://jennydaman.github.io>

## Education

### Thomas S. Wootton High School

Rockville, Maryland

CUMULATIVE UNWEIGHTED GPA: 3.58. WEIGHTED (OUT OF 5): 4.40

Graduation date: May 2018

<b>Math</b>	AP BC Calculus (5), AP Statistics (in progress), Multi-variable calculus and Diff. Eq. (in progress)
<b>Sciences</b>	H. Physics, AP Chemistry (in progress), AP Biology (5), Anatomy and Physiology (in progress)
<b>Social Studies</b>	AP Government and Politics (5), AP Micro/Macroeconomics (5, 5)
<b>Technology</b>	Computer LAN Management – CISCO Network Engineering (in progress)
<b>Programming 3</b>	Algorithmic analysis, advanced data structures, multi-threading, networks programming, intro to C.

## Additional Education

### EdX MASSIVE OPEN ONLINE COURSES (MOOC)

Aug 2016 **Becoming an Entrepreneur** — Product formulation and market strategy

MIT LaunchX

Mar 2017 **DAT208x Introduction to Python for Data Science** — numpy, matplotlib, pandas

Microsoft

### UNIVERSITY OF MARYLAND: DEPARTMENT OF FIRE PROTECTION ENGINEERING

Fall 2016 **Introduction to Math and Physics through Fire Dynamics**

### MONTGOMERY COLLEGE: DUAL ENROLLMENT

Fall 2017 **Computer Security** — CompTIA Security+

CMSC 260

Spring 2018 **Microbiology** — Lab + lecture, focus on bacteriology and immunology (in progress)

BIOL 210

## Experience

### aimHI

Food and Drug Administration

#### PRODUCT MANAGER

Summer 2016

- Coordinated project scope within a mock start-up environment.
- Researched solutions for improving treatment of postural orthostatic tachycardia syndrome( POTS).
- Used Android Studio to create wireframes for a mobile medical app.

### The Johns Hopkins Hospital

Department of Neurology

#### SHADOW

Summer 2017

- Shadowed under the guidance of Dr. Daniel B. Drachman and Dr. Andrea M. Corse.
- Assisted doctors with patient care and EMG nerve conduction studies.
- Experienced with patient interaction and treatment of neuromuscular disease.

## High School Extracurricular Activities

**Musical Pit Orchestra** — Trumpet

2014-2015

**Debate Team** — public forum

2014 - 2017

Competed in monthly "public forum" style debates: research and oral presentation.

**Wootton Red Team** — Website: <https://twlinux.github.io/>

2017 - 2018

Founder of after-school cyber-security club. Hosts weekly lessons on the topic of Linux software and penetration testing.

## Research

---

### Siemens Math and Science Competition

*Regional Semifinalist*

#### ENVIRONMENTAL SCIENCE

*Summer 2015*

- Performed *ab initio* density functional theory (DFT) calculations with ABINIT to calculate adsorption energies of select toxic gases onto the monolayers silicene, black (alpha) phosphorene, and blue (beta) phosphore (a theoretical allotrope).
- Evaluated the potential applications of new materials technology to resolving environmental issues such as air pollution by toxic gas remediation.

## Technical Skills

---

<b>GNU/Linux</b>	System administration on Arch Linux, Ubuntu, and Fedora
<b>Web Stack</b>	Modern front-end technologies including HTML5, CSS3, ES6 JavaScript frameworks and unit testing.
<b>Git &amp; Github</b>	source version control
<b>Java</b>	object oriented programming and concurrency
<b>LaTeX</b>	document composition

## Open-source Projects

---

*I develop web projects in my free time. Code is available on Github.*

### Mind Matter

[\*jennydaman/mindmatter\*](#)

- An educational Chrome extension. Description and prototype available from the Chrome Web Store.
- Started project to help myself to both learn about web development and to practice medical vocabulary.
- Front-end JavaScript technologies include Preact and Webpack.

### Let's Talk!

[\*twlinux/lets-talk\*](#)

- Intentionally vulnerable website for beginners to learn about basic code injection vulnerabilities.
- Front-end designed with materialize-css and jQuery.
- Express and MySQL back-end supported by containers and docker-compose.
- More than 200 upvotes on Reddit and 9 stars on Github.

### TWLinux

[\*twlinux/twlinux.github.io\*](#)

- Collection of concise guides about concepts regarding Linux and cyber-security.
- Hosted on Github pages, based on the jekyll theme daattali/beautiful-jekyll.
- Contributed several pull requests to upstream repository, related to CSS bugfixes, CSS customization, and use of Docker.