# HENRY CHEN

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# **EDUCATION**

University of Maryland

College Park, MD College of Computer, Mathematical, and Natural Sciences

Cumulative GPA: 3.94 Expected May 2020

Bachelor of Science, Computer Science 4.0/4.0 Bachelor of Science, Statistics N.A/4.0

Public Leadership, College Park Scholars

August 2017 – Present

In the Education group; managing fundraising and advocacy to help Prince George's County Public Schools

Top Performer, Capital One SWE Summit Challenge

November 2017

ACT: 36/36

One of 40 students nationwide invited to the Capital One SWE Summit for Winter 2018 after their MindSumo challenge Wolfram Alpha Award, MedHacks 2017 September 2017

Placed top 15 in the Johns Hopkins Medical Hackathon with an app that identifies pills to warn users of potential side effects

#### SKILLS

Languages: Proficient in Java, C, JavaScript (D3, Node.js, Firebase), HTML, CSS; Functional in Python, Assembly (MIPS), SQL Software: Eclipse, IntelliJ, LaTeX, Microsoft Excel & PowerPoint, Adobe Photoshop

# WORK EXPERIENCE

National Institute of Standards and Technology (https://github.com/usnistgov/PasswordVizTool/)

Gaithersburg, MD

June 2016 – August 2016

- IT Laboratory Summer Intern
  - Assisted in publicizing What's a Special Character Anyway? Effects of Ambiguous Terminology in Password Rules Analyzed data sets of over 8,000 passwords to examine the correlation between password requirements and complexity
  - Developed 1600 lines of software in Java and the JavaScript D3 library to automate password analysis and data visualization, used by NIST researchers to condense and conceptualize data

**Private Tutor** Rockville, MD

Afterschool Tutor

September 2014 – September 2016

- Tutored high school student for ~5 hours a week; helped with homework, tests preparation, and class participation
- Resulted in increased overall grade performance C student to B student

# **PROJECTS**

Air List (https://air-list.herokuapp.com/)

October 2017 – November 2017

- Web app analyzes AirBnB data from San Francisco to estimate and visualize hosting cost, investment, and popularity
- Developed 800 lines of code in JavaScript/Node.js for real-time back-end analysis

#### **Freebie Magnet** (http://freebiemag.net/)

October 2017

- Web app links users together by tracking nearby free events and giveaways, allows organizations to log in and add events
- Used JavaScript and Firebase

### Visual Python Explosion Simulator

May 2017

- Simulates an explosion from where the user clicks onto a cube of particles with customizable mass, force, and gravity
- Used VPython (Python with Visual, a 3D graphics module) for particle generation, animations, and calculations

### LEADERSHIP EXPERIENCE

UMD Gaming Club, Sandbox Admin

November 2017 - Present

- Host weekly events for members in the sandbox gaming subdivision of UMD Gaming
- Marketing intern on the Executive Board; learn how to effectively gain club funding and support

# Algorithms and Interview Preparation Club, Treasurer

November 2017 - Present

Responsible for securing and managing club funding

# Potomac Chinese School, Teacher Assistant

September 2014 – June 2016

- Assisted teachers with grading and managing young students
- Helped coordinate school-wide community competitions and events with hundreds of participants