

# HENRY CHEN

www.henrychen.design ♦ hyc@umd.edu ♦ 301-326-3233

## EDUCATION

---

### University of Maryland

College of Computer, Mathematical, and Natural Sciences

*Bachelor of Science, Computer Science, Major GPA: 4.0/4.0*

*Bachelor of Science, Statistics, Major GPA: 4.0/4.0*

College Park, MD

Cumulative GPA: 3.97

Expected May 2020

ACT: 36/36

### Public Leadership Program, College Park Scholars

August 2017 – Present

- Manage fundraising and advocacy to improve high school graduation rates in Prince George's County Public Schools

### Top Performer, Capital One SWE Summit Challenge

November 2017

- 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

---

**Advanced in:** Java, Python, C, JavaScript (D3, Node.js, Firebase, React), OCaml, Ruby, Swift, MATLAB, HTML/CSS (Bootstrap)

**Familiar with:** Assembly (MIPS), Rust, SQL

**Software:** Eclipse, IntelliJ, LaTeX, Logism, Arduino

## WORK EXPERIENCE

---

### Karsun Solutions

Herndon, VA

*Software Engineering Intern*

June 2018 – August 2018

- Incoming summer intern, will be working on GoLean.io (an Agile productivity app) with Angular

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

Gaithersburg, MD

*Software Engineering Intern*

June 2016 – August 2016

- Assisted in publicizing *What's a Special Character Anyway? Effects of Ambiguous Terminology in Password Rules*
- Designed and created Java software to analyze data sets of over 8,000 passwords
- Programmed JavaScript scripts to automate data analysis using the D3 library
- Used by NIST researchers to condense and conceptualize study data

## PROJECTS

---

### Chatarang

June 2018 – Present

- Creating a slack-clone with React.js and Aphrodite on front-end and Firebase for back-end

### WordNet

February 2018

- Implements a WordNet (lexical database for English) in Ruby
- Uses regex to validate file input, then stores and tracks synsets and respective hypernym relationships with a graph

### 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
- Created with JavaScript and 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
- Created with JavaScript and Firebase for OAuth 2.0 login authentication

### Visual Python Simulator

May 2017

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

## LEADERSHIP EXPERIENCE

---

### Algorithms Club, Treasurer

November 2017 - Present

- Responsible for securing and managing club funding

### Potomac Chinese School, Teacher Assistant

September 2014 – June 2016

- Assisted teachers with a class of 30 young students and helped coordinate events with 500+ attendees