HENRY CHEN

4145 Valley Dr ♦ College Park, MD 20742

301-326-3233 ♦ www.henrychen.design ♦ contact@henrychen.design

EDUCATION

University of Maryland
College Park, MD

College of Computer, Mathematical, and Natural Sciences
Cumulative GPA: 3.94

Bachelor of Science, Computer Science 4.0/4.0
Expected May 2020

Bachelor of Science, Statistics N.A/4.0
ACT: 36/36

Public Leadership, College Park Scholars
August 2017 – Present

- In the Education group; managing fundraising and advocacy to improve 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

Languages: Proficient in Java, C, JavaScript (D3, Node.js, Firebase), HTML, CSS, Ruby; Functional in Python, OCaml, Assembly (MIPS), SQL

Software: Eclipse, LaTeX, Microsoft Excel & PowerPoint, Adobe Photoshop

WORK EXPERIENCE

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

IT Laboratory Summer Intern
June 2016 – August 2016

- 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
- Created software with 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

WordNet (Coursework**)**
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 login authentication

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

Terrapin Hackers, *Marketing Team*
February 2018 - Present

- Improve organization outreach, web presence, and maintain the Terrapin Hackers newsletter

Potomac Chinese School, *Teacher Assistant*
September 2014 – June 2016

- Assisted teachers with grading and managing 30 young students; helped coordinate community events with 500+ attendees