Brvce M. Plunkett

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Education:

Candidate for Bachelor of Science in Computer Science at Georgia Institute of

 Expected to graduate in May 2022

 Centennial High School, Ellicott City, Maryland (GPA 4.0/ W 4.81)

 Data Structures Class, Object-Oriented Design Class

Honors:

- AP National Scholar
- 800 on Physics SAT Subject Test; 800 on Math II SAT Subject Test; 800 on Math Section of SAT

Experience:

Software Engineering Intern at the Johns Hopkins Applied Physics Laboratory

2018

- Built interactive data visualization widgets for large data sources using Angular, ES6, and python
- Developed a desktop application using Electron, Express (and other node modules), and Angular 6
- Assisted in coding Java 8 analytics algorithms for the group's proprietary data analytics library
- Used git as a VCS for all projects, which had development teams of varying sizes

Highschool Intern at the Johns Hopkins Applied Physics Laboratory

2016-2018

 Leverage Apache Storm, Hadoop, Apache Kafka, and VivaGraph to build real-time data ingestion, analytics, and visualization engines that uses distributed computing and WebGL

Projects:

Lantern (Angular App – Typescript)

Angular app similar with similarities to the basic functionality of Reddit

Ship Analytics Website MEAN App (with analytics in Python)

- Scrapes information off dynamic and variable Wikipedia pages about Naval ships and places them into a standard format along with standard units
- Calculated a similarity value and ranked how similar one ship was to all others

Image Steganography Tool (Python and C#)

- Encodes and decodes messages into and from images by modifying the LSB
- Encrypted messages bits are diffused throughout the image rather than placed linearly

Notable School Projects (all Java; not a comprehensive list)

- Monoalphabetic substitution cipher sentence "decoder"
- Probability-based Yahtzee strategy, probability-based Battleship strategy
- Efficient prime counter using segmented sieve of Eratosthenes

Activities:

Centennial Model United Nations Website Developer

2016-2017

- Created, designed, and maintained website used by the club
- Created a digital attendance system using MySQL and PHP to reduce fraudulent attendance reporting

Centennial Model Congress President

2017-2018

- Led initiative to pivot the club from expensive conferences to more affordable ones
- Develop a reusable series of lectures and supplemental materials to teach parliamentary procedure
- Engage highest number of active members since the group's inception

National Honor Society Webmaster

2017-2018

- Added significant functionality to the dynamic volunteer portal system using PHP, JavaScript, and MySQL
- Redesigned the website using principles from Material Design, adding a sense of depth and unity
- Maintained databases

Skills:

- Advanced: Angular >= 2, Bash Terminals, CSS (and SASS), HTML, Java 10, JavaScript (ES6), NodeJS, NPM, Python
- Intermediate: Apache Kafka, Apache Storm, C#, Electron, Emacs, Express, git, Hadoop DFS, LaTeX, Maven, MongoDB, MySQL, PHP
- Portfolio: https://github.com/Navbryce | https://gitlab.com/navbryce