

Brianna Ta

brianna.hy.ta@gmail.com | Herndon, VA | 571-250-8955 | [briannata.github.io](https://github.com/briannata) | <https://www.linkedin.com/in/briannata/>

Education

University of North Carolina at Chapel Hill, Chapel Hill, NC

May 2025

Bachelor of Science, Computer Science, GPA 4.00/4.00 (Dean's List)

Thomas Jefferson High School for Science and Technology, Alexandria, VA

June 2021

High School Diploma, GPA 4.44/4.00

Work Experience

Cisco Systems, *Technical Sales Engineering Intern*

May 2022 – Present

- Created the framework for facilities management and asset tracking in the US Air Force and Navy
- Developed Node-RED Webex and email notifications for smart facilities management of 8 data centers
- Integrated Node-RED and ATAK client for Federal IoT to track important assets
- Improved UI dashboard for monitoring LoRaWAN sensor data
- Helped run the Cisco High 2022 Program with over 140 externs at 9 sites nation-wide

TTeK, *Software Engineering Intern*

December 2021 – March 2022

- Created an augmented reality mobile app in Unity to help kids learn better (later adapted for Microsoft HoloLens)
- Developed admin website in React and integrated with Google Firebase database

Kenari Adaptive Learning, *Software Engineering Intern*

March – July 2021

- Performed QA, fixed bugs, and enhanced UI design with Angular components
- Integrated frontend with backend and Google Firebase database

re:Bloom, *Web Developer*

January - April 2021

- Developed several websites and special features for clients through WebFlow and WordPress
- Implemented FlexBot, SEO, and ADA regulations

Sirch, *Backend Developer*

January – March 2021

- Acted as team lead to manage meetings and allocate tasks
- Created a Twilio API proxy service and with Node.js; integrated with a MongoDB database, Bootstrap front end widget, and IOS app

Cisco Systems, *Project Development Extern*

June 2020

- Researched market technologies that would prevent the spread of COVID-19 and reduce the risk of in-person school
- Put together a presentation marketing my team's solution

Relevant Coursework

Machine Learning (Fall 2020 – Spring 2021): Machine learning using Jupyter notebooks, involving the application of categorization algorithms on the MNIST handwritten digits dataset (k-means clustering, OVR SVMs, logistic regression, decision tree analysis, CNNs)

Web App Development (Fall 2020): Web app development using JavaScript, HTML, CSS, and Handlebars, including web server configuration using Node.js, interacting with the DOM, using OAuth authentication, making use of middleware and cookies

Computer Vision (Fall 2019 – Spring 2020): An introduction to the field of Computer Vision in C++, beginning with computational geometry and convex hulls before moving into Canny edge detection and rendering 3D geometric shapes

Artificial Intelligence (Fall 2019 – Spring 2020): Artificial Intelligence with Python, covering game theory, graph traversal using A*, and minimax with alpha-beta pruning. Also covers decision trees, perceptrons, and neural networks using multivariate calculus, linear algebra, and machine learning libraries

Projects

OTIS (2nd Place, Cisco Webex Hackathon, January 2021): MERN stack web application for tracking building occupancy using Computer Vision and Machine Learning; deployed on Heroku using AWS

Taxi Traffic (1st in CabIQ category, HackTJ 7.5, December 2020): Web interface displaying our data analysis and prediction algorithm for taxi demand hot spots in DC

Mitigavite (Top 13, Bloom 2020 Startup Competition, July 2020): Evaluates vitals and symptoms using biosensors and user input, calculates probability of having COVID-19, checks if the user is wearing a mask properly

Guns Begone (HackTJ 6.0, April 2019): Python application that determines whether the firearm is within a certain proximity of a school or other public area, alerts security through email or push notifications along with information about the intruder

Care4Me (HackTJ 5.0, March 2018): Java application that asks questions specifically targeting areas of the brain affected by Alzheimer's and determines what kind of risk the user has for the disease

Skills

Software: Git, VS Code, Google Colab, Jupyter Notebooks, Microsoft Office/Google Suite

Programming Languages: Python, Java, HTML, CSS, JavaScript, C++, C

Technologies: OpenCV, Python ML (Pandas, NumPy, TensorFlow, Keras, Matplotlib), Node-RED, Node.js, Angular.js, React.js, Express.js, Handlebars, Node-RED, ATAK, MongoDB, Google Firebase, MySQL, AWS, LoRaWAN

Clubs

HackNC, **Director of Development** (Spring 2022 – Present): Led 30 members on the dev committee, restructured the website, organized several beginner-friendly workshops, programmed text notifications for events, team matching algorithm, and Devpost web scraping algorithm for judging

CS + Social Good, **Tech Lead** (Spring 2022 – Present): Led a team of web developers to create an analytical dashboard website for Environmental Educators of North Carolina (EENC), helped a local nonprofit (PORCH) create a website to log and track food donations

Girls Who Code, **Outreach Committee** (Spring 2022 – Present): Social media content creation, marketing for the club, reaching out to schools