

# Johnny Yang

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## EDUCATION

**University of Virginia, School of Engineering and Applied Science** – GPA: 3.2/4.0 | Major GPA: 3.5/4.0 Charlottesville, VA  
Bachelor of Science, Computer Science May 2023  
**Relevant Coursework:** Advanced Software Development, Algorithms, Data Structures, Database Systems, Mobile App Development

## WORK EXPERIENCE

- CoStar Group** – Software Engineering Intern Jun 2022 – Aug 2022
- Created dashboard integrated into existing NagiosXI webapp to monitor data pipeline between Kafka and enterprise systems
  - Wrote parameterized bash script linked to services to monitor dynamically created consumer groups and connectors characteristics across development environments using interleaved checks, thus reducing development time and lag
  - Containerized initial Nagios testing and development process using Docker
  - Communicated with senior engineers during meetings to address scaling and integration challenges
- MetaCTF** – Software Engineering Intern Jan 2021 – July 2021
- Designed new framework for initializing, analyzing, and configuring AWS EC2 Instances with Guacamole and Boto3
  - Created a MySQL database to modify and retrieve information on VMS, SecurityGroups, users, permissions, connections
  - Utilized flask and Redis to retrieve POST/GET requests and queue tasks for executing developed framework functions respectively
- Biocomplexity Institute** – Undergraduate Researcher Oct 2020 – May 2021
- Utilized and learned machine learning to map and analyze spread of invasive plant species in Nepal using Python and Bash
  - Organized lab satellite images by developing a BASH script to extract, split, and categorize large satellite imagery with MapBox
  - Improved generation of RASTER plant images by including missing values for satellite band gains, and bias values in configuration
  - Modified existing framework to design a transfer learning pipeline that extracted a standardized combination of invasive plants for Inception/Xception model weights to apply onto other plants

## PROJECT EXPERIENCE

- HoosYourFit (2<sup>nd</sup> Place Health Track - University of Virginia Hackathon)** – React, Node, Express, Heroku, Git Spring 2022
- Collaborated with team developing a web application for finding workout partners based on compatibility and preference factors
  - Lead and facilitated backend and frontend development by creating a plan and communicating roles and tasks to teammates
  - Focused on manipulating data received from HTTP requests and user-input through Axios, Json-server, and Express endpoints
- Elder Life (Best Community Project - John Hopkin's Hackathon)** – Java, Android API, Google Maps API, AR API Fall 2020
- Lead development of an Android app connecting the elderly with young volunteers for location-based tasks to complete in exchanging for virtual prizes with Google Maps and AR APIs
  - Delegated screen design to team and ensured proper transitions and connections between them
- Path Think**– Java, XML Android API, Google AdSense Winter 2019
- Developed a strategy game app in an effort to enhance user's working memory by memorizing tile positions on screen
  - Designed multiple themes, levels, powerups, and obstacles for gameplay, ensuring users stayed entertained
  - Incorporated Google AdSense in non-disturbing locations on screen, providing quality user experience
- CustomDeath** – Java, Spigot API, Vault API Summer 2017
- Developed a Minecraft Server plugin (20,000 downloads) to customize players' deaths animations using either YAML files or a customized command argument system
  - Integrated permissions and economy APIs to add other features such as removing player's currency and setting permissions
  - Received and implemented user input for improving plugin's usability and implementation of new features

## SKILLS & CERTIFICATIONS

**Languages:** Java, JavaScript, Python, C++, HTML, CSS, XML

**Frameworks/Libraries:** React, Node, Django, Android, Flask, boto3, Guacamole, NagiosCore

**Others:** Agile, Ubuntu WSL/terminal interface, Bash, Vim, Docker, Git, MySQL, Amazon Web Services, Kafka

## ORGANIZATIONS

Fujianese Student Association (President), STEM Fun (Founder), UVA Secret Santa (Founder), Improv Comedy, Intramural Basketball