

# Johnny Yang

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## EDUCATION

**University of Virginia, School of Engineering and Applied Science**

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**, Washington D.C – Software Engineering Intern

Jun 2022 – Aug 2022

- Created dashboard integrated into existing NagiosXI app to monitor 3 financial data pipelines between Kafka and enterprise systems
- Wrote parameterized Bash script linked to services with interleaved checks on dynamically created hosts across development environments, thus reducing development time and lag while providing real-time insights on data consistency
- Containerized initial Nagios testing and development process using Docker
- Communicated with senior engineers during meetings to address scaling and integration challenges

**MetaCTF**, Charlottesville, VA – 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**, Charlottesville, VA – 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

**University of Virginia Hackathon - HoosYourFit (2<sup>nd</sup> Place Health Track)** – 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

**Johns Hopkin's Hackathon - Elder Life (Best Community Project)** – Java, Android API, Google Maps API, AR API Fall 2020

- Lead team of 5 in 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 several screens

**Path Think**– Java, XML Android API, Google AdSense

Winter 2019

- Developed Google PlayStore strategy 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

## LEADERSHIP & EXTRACURRICULARS

Fujianese Student Association (President), STEM Fun (Founder), UVA Secret Santa (Founder), University of Virginia's Career Center (Career Peer Educator), Improv Comedy, Intramural Basketball