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

SKILLS & CERTIFICATIONS

Languages: Java, JavaScript, Python, C++, HTML, CSS, XML, MATLAB
Frameworks: React, Node, Django, Android, Flask, boto3, Guacamole
Others: Agile, Ubuntu WSL/terminal interface, Bash, Git, MySQL

WORK EXPERIENCE

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 (2nd 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

EXTRACURRICULARS & INTERESTS

STEM Fun – Founder   Jan 2018 – Aug 2019
- Founded club at local library to host workshops teaching children STEM topics with interactive learning tools such as Spheros, Makey Makey, and Ozobots
- Lead, recruit, and taught members to teach specific topics in workshops resulting in an expansion from 2 to 20 children participating per workshop
- Invited and brought teachers to demonstrate fun science concepts

Organizations: Fujianese Student Association (President), Improv Comedy, Intramural Basketball