David Chang

changdavid52@gmail.com · (626) 944-6591 · linkedin.com/in/davidchang52 · github.com/davidchiii

EDUCATION

New York University   **New York, NY**
B.S. in *Computer Science*   Expected December 2023
Minor in *Integrated Media and Design*

- **Dean's List –** Spring 2023
- **Relevant Courses:** Algorithms, Data Structures, Object-Oriented Programming, Software Engineering, Computer Architecture, Databases, Machine Learning, Natural Language Processing, Artificial Intelligence, Open Source Software Development

Troy High School   **Fullerton, CA**
High School Diploma   May 2020

WORK EXPERIENCE

Offensive Security, Incident Response, and Internet Security Research Lab, Infrastructure Manager   May 2023 – Ongoing

- Managed live server environment using Proxmox hypervisor environment to partition resources for research lab members
- Optimized infrastructure with Docker and virtual machines by templating 7 public facing services and DNS records
- Improved documentation of network infrastructure through network diagrams and configuration management
- Ensured uptime of essential web services of Offensive Security class @ NYU with 100+ students and faculty

National Geospatial-Intelligence Agency (NGA), Software Engineer Intern   May 2022 – August 2023

- Organized compartmentalized datasets in Gitlab and revised CI/CD workflows to improve code deployment efficiency
- Presented machine learning regression solution in AWS Sagemaker to simplify accounting systems and budgeting
- Developed UI-testing library using Selenium and Javascript to perform code unit-tests replacing manual testing

SmartAxiom Inc., Software Engineer Intern   June 2019 – July 2019

- Implemented ECDSA key exchange algorithm using Python to initiate secure connections with IoT devices
- Presented system design implementation to integrate into private blockchain-style network to management

PROJECTS

Cybersecurity Awareness Week (CSAW) CTF Organizer   Sept 2023

- Lead team to write, develop, and deploy security capture-the-flag challenges using Github Projects with 50 members
- Organized weekly sprint meetings, negotiated event acquisitions, and planned tag-ups with 4 infrastructure engineers
- Developed infrastructure systems on Amazon Web Services to support over 1500 teams and 18000 data connections

Genre Prediction Machine Learning Project   March 2023 – May 2023

- Developed a classification model with sklearn and Pytorch to predict the genre of audio samples using neural networks
- Wrote a research project paper describing procedures and results and presented to a class panel
- Implemented extraction of 60+ analog features from with Python signal analysis tools such as Librosa

NYU Blind   September 2022 – May 2023

- Designed project using Agile software development methods, collaborating with 4 other developers over 8 months
- Utilized Bootstrap to develop front-end elements to improve user UI in collaboration with end-user requests
- Developed a web application with Python and Django to serve as social media solution for New York students

ACCOMPLISHMENTS

HackNYU 2022   Feb 2022

- *Acquisite:* Developed web application to connect small businesses with onlooking investors hosted on Google Cloud
- Utilized Bootstrap 5 and Flask to develop full-stack application with modern UI elements and CRUD database support

CISCO National Networking Challenge 2nd Place   May 2020

- National runner up in Airforce Association's Cyberpatriot CISCO networking challenge
- Designed and implemented network architecture at Cyberpatriot XII national competition using CISCO Packet Tracer
- Utilized CISCO IOS to implement virtual private networks and network routes as well as local layer switchport security

TECHNICAL SKILLS

- **Programming Languages:** Python, C++, Java, Javascript, HTML/CSS, SQL, Bash
- **Software Technologies:** Unix Shell, Git, Docker, AWS, Flask, NodeJS, ReactJS, Pytorch, HuggingFace Transformers