

Donald Yang

929-561-1319 | dyang32@binghamton.edu | github.com/dyang21 | dyang21.github.io

SKILLS

Certifications: CompTIA Security+, AutoCAD Certiport Certified 2017, OSHA 10-Hour Construction Safety and Health

Languages: Python, C++, SQL (Oracle SQL, SQL), Groovy, C, C#, Bash, PowerShell, YAML, JavaScript, HTML5

Tools & Software: Kafka, Jenkins, Pytest (Unit Testing), Socket, Threading, SQLite, Flask, WireShark, pfSense, AutoCAD

Platforms: Linux, UNIX, Windows, VMWare vSphere 6/7

Infrastructure Management: Docker, Kubernetes, Helm, EOL Transitions, Patching, Upgrading, Troubleshooting

Data & CI/CD: Data Pipelines, Jenkins Automation, Relational Databases

WORK EXPERIENCE

Deltex, System Administrator Intern – Remote June 2022 – August 2022

- Orchestrated the EOL transition for Windows Server 2012 R2 systems, mitigating potential vulnerabilities and ensuring continuous service through coordinating decommissioning, in-place upgrades, and VM requests.
- Enhanced IT communication strategies, fostering clear collaboration through detailed emails and discussions; recognized for exceptional customer service, streamlining server management procedures, and boosting user satisfaction.
- Leveraged VMWare vSphere to optimize infrastructure management, including organizing server tags, managing external server lists, executing patches, and implementing system rollbacks to maintain service integrity.
- Drafted comprehensive documentation on Windows Server 2012 R2 EOL transition and led team training sessions, ensuring knowledge transfer and reinforcing best practices within the team.

Tottenville High School, Computer Technical Assistant – Staten Island, NY June 2019 – July 2019

- Installed Mac/Windows operating systems and printer drivers, streamlining computer setups for school use.
- Assembled and set up computers with the necessary cables and hardware, ensuring students had functional systems.
- Configured and optimized networking equipment, facilitating stable Ethernet connections for improved connectivity.

PROJECTS

Continuous Data Integration/Deployment System (DevOps) June 2023 – August 2023

- Administered Kubernetes configurations for Jenkins on Minikube, securing Docker socket and project deployment with Role-based access control (RBAC) for access control and permissions; heightened security through user-role transitions in Jenkins Docker environments and network isolation protocols.
- Designed an end-to-end sensor data pipeline beyond the limits of ChatGPT, ensuring project authenticity; Utilized Kafka for data transmission and SQLite for lightweight applications across three microservices.
- Streamlined system scalability and efficiency by implementing Docker for microservices and establishing Continuous Integration/Deployment (CI/CD) pipelines with Jenkins, resulting in faster deployment and resource optimization.
- Deployed Kafka and Zookeeper via Helm in Minikube, showing infrastructure automation skills and Infrastructure as Code (IaC) with Kubernetes manifests, while also enhancing system reliability through unit testing to support data integrity.

Multithreaded Web Server and Proxy Cache April 2023 – May 2023

- Collaborated with a colleague on the development of a multithreaded web server that supported both HTTP 1.0 and HTTP 2.0 requests, enabling efficient handling of large file transfers by maintaining persistent TCP connections.
- Designed and implemented a proxy cache system that stored recent requests, significantly reducing server loads and enhancing data retrieval speeds.
- Incorporated a UDP pinger mechanism to the proxy, transmitting pings to ensure server availability during cache misses.

Virtual Home Lab October 2020 – August 2021

- Established GPOs and a centralized file server, streamlining device management and ensuring secure data storage.
- Enhanced overall network security with VLAN segmentation, effectively reducing potential attack vectors.
- Seamlessly integrated pfSense LDAP with Windows DC, promoting a robust, secure AD login mechanism.
- Deployed Pi-Hole domain-wide, speeding up web browsing, minimizing ads, and bolstering domain name resolution through a recursive DNS.

Lost In Space (Platformer) October 2019 – December 2019

- Solely handled the complete development of a Python-based side-scrolling game using Pygame, integrating advanced game mechanics and dynamics; the project was recognized and awarded 3rd place among 30 teams for its engaging design

AWARDS & ACHIEVEMENTS

Google Tech Challenge 2019 @ Binghamton University - 1st Place Team September 2019

- Competed against a dozen campus teams by working with four colleagues in coding speed-runs and puzzles.

New York City Science and Engineering Fair (NYCSEF) - Finalist June 2019

- Assisted in the design and presentation of a prototype that uses NYC's 311 API to populate a map with four colleagues.

EDUCATION

Binghamton University, State University of New York, Thomas J. Watson School of Engineering and Applied Science

Bachelor of Science in Computer Science

Graduated August 2023