# Donald Yang

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## 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 Integration & CI/CD:** Data Pipelines, Jenkins Automation

## WORK EXPERIENCE

**Deltek,** 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,** Technical Aide – 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 (CDIS)**                          June 2023 – August 2023
- 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 CI/CD pipelines with Jenkins, resulting in faster deployment and resource optimization.
- Managed Kubernetes configurations, including kubeconfig file creation for Jenkins to interact with the Minikube cluster, while implementing granular access controls and permissions within the namespace, securing containers.
- Enhanced system reliability by integrating Kubernetes-based unit tests, fortifying data integrity and bolstering application performance.

**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