

Diego Troy Lopez

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About

Full-stack Software engineer with experience in designing and implementing systems, network and distributed solutions from scratch. Excellent productivity output, leadership skills w.r.t. organization, project management. Looking for challenging positions in Cybersecurity or Infrastructure. **"How you do anything is how you do everything"**.

Education

New York University | Computer and Data Science, B.A. 2019 - 2023

- Minor in Cybersecurity
- **4x Dean's list Award, University Honor's Scholar, Graduated Cum Laude**

New York University | Cybersecurity, M.S. 2023 - 2025

- Cyber Fellows student in part-time Master's program (**GPA: 4.0**)

Certifications

CompTIA Network+ (ID: W3SJPVQYD2B11T3D) | **CompTIA Security+** (ID: DTBV8KHYJM411LWS)

Technical Skills

- **Languages:** Python, SQL, Bash, Java, YAML, C/C++, HTML/CSS, Scala, Golang, Pwsh, MATLAB
- **Concept Areas:** Network Security, System Administration, System Security, Network & System Automation, Data Engineering, Intrusion Detection, NIST CSF, DevOps, MLOps, Malware Analysis, Network Engineering
- **ML Tools:** Scikit-learn, H2O, Tensorflow, Ray, Spark (MLlib, Streaming), MLflow, PyTorch, Kubeflow
- **Cybersecurity & IT Tools:** Zeek, Docker, Kubernetes, Ansible, Kafka, ELK, Splunk, InsightVM, LibreNMS, Netbox IPAM, Packetfence Panda.re, Metasploit, ZAP, Cortex XDR

Work Experience

Research Network Engineer | *NYU Research Technology Svcs* May 2023 - PRESENT

- **Architect, implemented network & systems monitoring solution** with high performance Zeek (PF_RING, XDP), SPAN, ERSPAN, SNMP with NMS, Syslog pipelines with ELK and Splunk
- **Implemented network security** with Dot1x, network ACLs (Arista, SONiC), AI assisted intrusion detection
- **Developed automation scripts** for network device deployment, system deployment and tasks using Ansible
- **Developed novel research workflows** and case studies leveraging Kubernetes, Stream Processing
- **Managed, troubleshooted and expanded enterprise network** of 40+ switches across 9 sites

Program Lead | *NYU Research Technology Svcs* Aug 2022 - May 2023

- **Led interdisciplinary program of 30 Students** in software development for Research Technology
- **Architect, implemented** scalable organizational structure that allowed 50% headcount increase
- **Led research team** of 4 Master's students in development of ML & DL methods for Network Intrusion Detection

IT Technician | *NYU IT* Sep 2019 - Aug 2022

- **Imaged, installed and maintained IT systems** including desktops, laptops, servers, etc
- **Managed IT infrastructure** including Asset tracking, UEM & Device configurations, DNS
- **Provided technical support** for end-user requests including pswd resets, MFA, IT systems, Windows/Mac, AV

Research Assistant | *NYU Fox Lab* Sept 2021 - Apr 2022

- **Assisted with designing, performing experiments** analyzing personality association with music
- **Created pipelines, visualizations, analyzed results** with statistical tests using Python, MATLAB

Projects

IoT-23 Analysis | *Capstone Analysis on Cybersecurity Dataset* 2023

- Evaluating assay of supervised, unsupervised, deep learning techniques for malicious network flow prediction
- Used feature engineering to enhance classifiers using domain specific knowledge from networking, cybersecurity

Courses

Calculus I & II | Algorithms | Intro. to Machine Learning | Advanced Deep Learning | Processing Big Data
Penetration Testing & Vulnerability Analysis | Application Security | Computer Security | Network Security