

# Zachary Bakhchi

New York, NY | [zachbbec@aol.com](mailto:zachbbec@aol.com) | 516-669-4492  
[linkedin.com/in/zachary-bakhchi](https://www.linkedin.com/in/zachary-bakhchi) | [bakhchi.github.io](https://bakhchi.github.io)

## EDUCATION

### The Cooper Union for The Advancement of Science and Art

New York, NY

*Bachelor of Engineering in Electrical Engineering, Half-Tuition Scholarship*

*Aug. 2023 – May 2027*

**Related Coursework:** Digital Logic Design, Circuit Analysis, Data Structures and Algorithms, Signal Processing, Electronics, Computer Architecture, Communication Networks, Calculus (I-III), Differential Equations, Probability

## EXPERIENCE

### Ana's Cloud LLC

Manhasset, NY

*Engineer*

*September 2023 – Present*

- Currently spearheading product development of intrusion detection system as a service to clients.
- Led the successful implementation of an AI chatbot, enhancing customer engagement for a major client.
- Conducted in-depth research on ADA compliance and advanced web design strategies tailored for small businesses.
- Diagnosed and resolved technical issues while developing custom programming solutions for client's applications.
- Participated in disaster recovery for a client following data-breach.

*Intern*

*December 2022 – August 2023*

- Explored the potential of Microsoft Copilot and other large language models, proposing innovative client solutions.
- Provided desktop support, audited IT assets, and created detailed network diagrams for a diverse client base.
- Played a key role in training a remote technician, eventually co-managing operational responsibilities.
- Executed data migration projects, transitioning legacy systems to modern, cloud-based storage solutions.

## PROJECTS

### Large Client AI-Chatbot | *Python, NodeJS, Azure AI, Git*

*June 2024 – April 2025*

- Made for The Conference Board (a client of Ana's Cloud) allowing users to preview TCB's subscription based content.
- Wrote a custom NodeJS script to parse through TCB's various documents, vectorize its contents, and upload it to a Azure AI Search Index.
- Customized an open source "ChatGPT" app to connect to search index and a Microsoft Bing API, querying relevant topics to TCB Copilot.

### TCP/UDP Port Scanner | *Python*

*February 2025*

- Developed a multi-threaded port scanner capable of scanning internal and external IP addresses with high-speed performance.
- Supports batch input via tab-delimited text files, logging results to an output file with structured formatting.
- Identifies active processes on open ports using system-level socket inspection.

### Client Intrusion Detection Service | *Computer Networks, Linux*

*May 2025 - Present*

- Designed and deployed a network-based intrusion detection and log correlation system using open-source tools to monitor traffic, analyze system activity, and generate real-time alerts on suspicious behavior.
- Tuned detection rules and logging configurations minimize false positives while maintaining high-fidelity alerting.
- Automated system maintenance with Linux shell scripts for log rotation, resource monitoring, and service health checks.

## SKILLS

**Languages:** Python, JavaScript, HTML, SQL, Java, C/C++, PHP, MATLAB

**Technologies:** Git/GitHub, Jira, Microsoft Office/Google Workspace, Azure AI, Windows, Linux

**Others:** Electrical Engineering, IT Helpdesk, Computer Networks, PC Components, Microsoft Visio, L<sup>A</sup>T<sub>E</sub>X, Logisim

## PERSONAL INTERESTS

Chess, Puzzles, Movies, Music, Exercise, Gaming