

Mark Zbarsky

CONTACT

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Location: Staten Island, NY

EDUCATION

Rensselaer Polytechnic Institute

08.22 – 05.26

B.S. in Computer Systems Engineering — GPA: 3.63

Troy, NY

- **Relevant Coursework:** Advanced Materials, Metrology, and Equipment for Semiconductor Manufacturing; Computer Architecture, Networks, and Operating Systems; Embedded Control; Machine Learning from Data; Algorithms; Data Structures; Computer Hardware Design; Microprocessor Systems.

TECHNICAL SKILLS

- **Languages:** Python, C/C++, SQL, Java, Verilog, HTML/CSS, Assembly
- **Tools & Technologies:** Git, MATLAB, Quartus, LTSpice, Code Composer Studio, Microsoft Office

EXPERIENCE

Advanced Technology Group

05.25 – 08.25

Engineering/Cybersecurity Intern

New York, NY

- Managed network infrastructure, security, and technology systems for 20+ diverse clients including financial firms, law offices, hotels, and restaurants.
- Conducted on-site hardware installations and replacements (switches, access points, servers, UPS systems) while ensuring end-to-end connectivity and optimal performance.
- Collaborated directly with client stakeholders to gather requirements, troubleshoot incidents, and implement secure solutions with comprehensive documentation.

DataAnnotation Tech

05.24 – 05.25

Prompt Engineer

New York, NY

- Designed complex prompts and maintained multi-turn conversations with AI models to test responses and identify edge-case failures across programming and academic domains.
- Analyzed model outputs and authored reference responses used as training data and evaluation benchmarks.
- Created evaluation criteria and performance rubrics; documented model flaws, safety issues, and comparative strengths to drive iterative improvements.

Richmond University Medical Center

05.24 – 08.24

IT/Biomedical Intern

Staten Island, NY

- Maintained hospital IT infrastructure supporting 500+ PCs, 500 phones, 100 printers, and critical medical devices including vital signs monitors, incubators, and oxygen systems.
- Supported planning and deployment of a new 10-room surgical wing with integrated patient monitoring systems enabling centralized vitals tracking.
- Coordinated with clinical staff to minimize downtime during system cutovers and ensure seamless workflow continuity across departments.

Polymathic Innovations, LLC

01.24 – 05.24

Student Researcher

Troy, NY

- Designed and built a vertical-axis wind turbine (VAWT) for cost-efficient urban deployment compared to traditional horizontal turbines.
- Developed C++ and Python data acquisition software to capture sensor readings and generate automated Excel reports for performance analysis.
- Improved turbine efficiency by 15% through iterative design optimization and implemented predictive maintenance alerts based on sensor trend analysis.

LEADERSHIP & ACTIVITIES

Pi Lambda Phi Fraternity, NYKT Chapter

11.24 – Present

Executive Vice President (Internal Affairs & Risk Management)

Troy, NY

- Oversee internal relations and chair positions including brotherhood, social, and sports; organize chapter events such as mixers and outings.
- Assess, mitigate, and document operational risks across event planning and execution to ensure safe and compliant chapter activities.

Pi Lambda Phi Fraternity, NYKT Chapter

01.24 – 12.24

Community Service Coordinator

Troy, NY

- Established rotating volunteer teams of 3-5 members providing bi-weekly support to local food pantry, ensuring consistent community impact.
- Organized additional service opportunities including food farm work, cleanup projects, and career fair support, increasing chapter volunteer hours by 400% year-over-year.