MADELYN NOVELLI

Montvale, NJ | (551) 497-3018 | madelynnovelli@gmail.com | **Website:** skutch30.github.io/maddie-website

EDUCATION

Georgia Institute of Technology — Atlanta, GA
Bachelor of Science in Computer Science — Expected: May 2025
- **Concentrations**: Information Internetworks, Human-Computer Interaction (HCI)
- **Honors**: Dean's List, Dean's Scholarship Recipient (1 of 2 recipients in the school)

TECHNICAL EXPERIENCE

Georgia Tech Research Institute — Atlanta, GA
Embedded Systems Cybersecurity Researcher — Aug. 2023 – Dec. 2024
- Assessed security vulnerabilities of IoT hardware devices through hardware reverse engineering, software/firmware analysis using **C** and custom **Python scripts**, and static/dynamic testing with **Ghidra**
- Engineered a surrogate device to emulate the Signaling Line Circuit network of a wireless fire alarm system using an **Arduino microcontroller**

Verizon — Branchburg, NJ
Network Engineering Intern — June 2024 – Aug. 2024
- Integrated Red Hat's **Kepler power-monitoring platform** to monitor carbon dioxide emissions and power consumption across a cluster of **500+ Kubernetes pods** in the North Seattle server
- Deployed cpufrequency **container images** to dynamically optimize and **reduce power consumption**, supporting smart, eco-friendly business practices aligned with sustainability goals

Network Engineering Intern — June 2023 – Aug. 2023
- Developed and automated an **inventory management system** using **OpenShift API** and **Redfish technology** to collect and organize hardware details from multiple bare-metal server clusters
- Designed a user-friendly interface for enhanced inventory tracking and strategic decision-making, leveraging **Node.js** and **PostgreSQL**

PROJECTS

Website Design | *HTML, CSS, JavaScript* — Dec. 2022 - present
- Built a **personal website** to showcase my professional portfolio, technical skills, and projects
- Created a promotional website for **Jude Tobias Poetry**, incorporating animations to enhance **user experience**

Enchanted Quest Adventure | *Java, Git, Android Studio* — Aug. 2023 – Dec. 2023
- Collaborated in a team of five to develop a **2D video game** across five two-week Sprints following **Agile** project management methodology and Git version control
- Implemented core gameplay mechanics, including **3** distinct levels, a dynamically updating leaderboard, and start/configuration/end screens, while integrating **object-oriented design** principles

INVOLVEMENTS

Georgia Tech Professional Education — Atlanta, GA
Student Assistant, Registrar's Office — Sep. 2022 - present
- Maintain a comprehensive database of academic records for **26,000+ working professionals** enrolled in online degree programs at Georgia Tech

Collegiate Panhellenic Council — Atlanta, GA
Director of Educational Programming — Dec. 2022 – Dec. 2023
- Organized health, wellness, and professional development events for **1,500+ members** of the Panhellenic community, including collaborations with the GT Career Center to host resume workshops

SKILLS

Languages: Java, Python, C, HTML, CSS, JavaScript (Node.js, D3.js), SQL (MySQL, PostgreSQL), R
Developer Tools: VS Code, IntelliJ, Android Studio, Jira, Docker, Kubernetes, Figma, Tableau, Grafana, Ghidra
Technologies/Frameworks: Git, Linux/Unix (Ubuntu), Agile Methodology, Scrum, Object-Oriented Design