

Mary Cotrupi

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Education

Rensselaer Polytechnic Institute (RPI)

Troy, NY

BS in Computer Science and Information Technology & Web Science | GPA: 3.8/4.0

Aug 2023 - May 2027

- **Concentrations:** Artificial Intelligence, Machine Learning, Data Science, and Information Security
- **Coursework:** Data Structures, Computer Organization, Foundations of Computer Science (Discrete Math), Introduction to Algorithms, Web Science Systems Development

Technical Skills

Certifications: ISC2 Certified in Cybersecurity (CC), CompTIA IT Fundamentals+ (ITF+)

Technologies: Python, C++, C, HTML/CSS/JavaScript, PHP, SQL, Kali Linux, Git, Nmap, Burp Suite, Wireshark

Experience

Research Assistant | Rensselaer Cybersecurity Collaboratory

Aug 2024 - Present

Ethics of Generative AI through Cybersecurity Training

- Presented "Generative AI for Cybersecurity Awareness Training: Skills, Strategies, and Accountabilities" at BSides St. Pete 2024, a leading national cybersecurity conference | St. Petersburg, FL – Sep. 2024
- Analyzed risks and rewards for allowing Generative AI to create and administer security awareness training while studying the ethics, usefulness, and biases of the AI for security professionals
- Performed data collection, data analysis, and dissemination under Dr. Brian Callahan

Augmented Reality Cyber Security CTF pedagogy

- Developed a new cybersecurity educational curriculum, a CTF event using Augmented Reality (AR) technologies

National Cyber League (NCL) Competition | Cyber Skyline

Aug 2023 – Present

- Specialized in Enumeration & Exploitation, Password Cracking, and Open-Source Intelligence; ranked in the top 10% of 4,199 teams nationally (Spring 2024)

Web Designer and Media Manager | The Porch LLC – Sandwich, NH

July 2021 – Present

- Built theporchnh.com with HTML/CSS/JS, WordPress, and implemented SEO best practices to reach 4000+ users
- Managed digital presence on Google Business, Bing Places for Business, Instagram, Facebook, and Yelp

Leadership & Professional Membership

ISC2 Capital District NY Chapter

Aug 2024 - Present

- Organized monthly chapter meetings, bringing together students and cybersecurity professionals
- Worked with ISC2 leadership to create a cybersecurity academic conference and career fair at RPI

Association for Computing Machinery - Women (ACM-W) | RPI

Aug 2023 - Present

- Mentored first-year computer science students from underrepresented backgrounds
- Fundraising Chair (Spring 2024) - Proposed and implemented new fundraising initiatives

Rensselaer Cybersecurity Collaboratory

Aug 2023 – Present

- Student Leader & Admin - Organized and led weekly CTF team meetings, teaching topics such as Open-Source Intelligence and Forensics and increasing participation across all majors at RPI

Projects

MentorMatch | RPI ITWS1100

Spring 2024

- Web application that matches students to tutors based on availability and preference algorithms - HTML/CSS/JS/PHP

Microcontrollers & Christmas Trees | Moultonborough Academy

Fall 2022

- Mapped 500 LEDs on a Christmas tree and developed 15+ animations in Python and C++ for Arduino UNO to display festive 3D light animations for local community