

# Tyler V. Rimaldi

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📷 Vezio

📱 TylerRimaldi

## EDUCATION

- **Marist College** Poughkeepsie, NY  
*Bachelor of Science in Computer Science with a Concentration in Software Development;  
Minors in Mathematics, Philosophy, Information Technology, and Information Systems*  
*GPA: 3.807/4.000* Expected May 2021

## HONORS

- Marist College **Honors Program**, Marist College **Deans' Circle** (top 3% of students), Marist College **Dean's List**
- Marist College **Teaching Assistant**, Hudson Valley **Scholar Award**, +300 Hours of **Community Service Award**

## EXPERIENCE

- **IBM – Z AI & Analytics** Poughkeepsie, NY  
*Software Developer Intern* June 2019 - Present
  - Contributed to **5 patents** focused around **search optimization** and **lexical analysis**
  - Ported **Python Scikit-Learn** data science notebooks to **Java SparkMLlib** and **Kafka** to handle larger data sets
  - Implemented **neural network activation functions** such as ReLU, Sigmoid, TanH, and Softmax for test simulations in **C**
  - **Optimized** Jenkins with parallel stages and **memoization** to halt failing test suites and to clean-up zombie processes
  - Developed a **React application** to find COVID-19 testing sites with the lowest wait-times based on user reported data
  - Developed a **high interaction** honeypot that mimics a server within a Docker Container – **Featured on IBM Blog Post**
  - **Mentored 3 software developer interns** by hosting weekly 1 on 1 meetings and workshops to share and learn new skills
  - One of five **instructors** to teach an IBM internal **introduction to python** course with over 100 participants
- **Marist College Doctorate of Physical Therapy Research Platform** Poughkeepsie, NY  
*Research Assistant & Full Stack Developer* January 2019 - Present
  - Engineered a **new pedagogical tool** that **enhances** manual therapy instruction and **streamlines** student learning
  - Our tool **provides** its **users** with **performance** and **progress** metrics with respect to their manual therapy training
  - Developed a web and desktop application using **ElectronJS**, **Vue/VuexJS**, **Bootstrap**, **Flask**, and **PostgreSQL**
  - Leveraged a **Dockerized microservice oriented architecture** for rapid development and deployment
  - Integrated Studio 1 Labs' fabric sensor technology with our system architectures for **real-time data capture**
  - Leveraged our lightweight Flask REST API for **microservice orchestration** and **graph data processing**
  - Presented at **Con Edison's** Engineers week and was accepted to the **2020 National Collegiate Honors Conference**
- **IBM – Marist Joint Study** Poughkeepsie, NY  
*Secure Cloud Grant Research Assistant & Software Developer* May 2018 - May 2019
  - Researched mindsets of an attacker, deceptive honeypot models, and honeynet implementations
  - Developed a **low interaction** JavaScript honeypot that sends attack data to RabbitMQ and to our data visualizer
  - Implemented analysis tools such as line graphs (ChartJS) and attack totals on our data visualizer
  - **Managed** IBM/Marist Trusted Identity Project collaboration and organized test groups to analyze user experiences
  - Developed a NodeJS template for an SDK API Wrapper to demonstrate functionality for new hires
  - **Co-Authored**, **published**, and **presented** two research papers in **IEEE** proceedings

## RESEARCH PUBLICATIONS AND PRESENTATIONS

- **IEEE MIT Undergraduate Research Technology Conference 2018**, Cambridge, Massachusetts:  
“A HoneyNet Environment for Analyzing Malicious Actors”
- **IEEE Columbia University Ubiquitous Computing, Electronics and Mobile Communications Conference 2018**, New York, NY: “Implementing a Mobile Identity Application in a Ubiquitous Computing Environment”
- **Enterprise Computing Community**, Poughkeepsie, NY: “Creating a New Educational Tool for Instructing Orthopedic Manual Therapy with Fabric Sensor Technology”
- **1st Place IBM Tech Connect 2018**, Poughkeepsie, NY: “Implementing a Mobile Identity Application in a Ubiquitous Computing Environment”
- **2nd Place at the 9th Annual Cybersecurity Conference at New York Institute of Technology 2018**, New York, NY: “A HoneyNet Environment for Analyzing Malicious Actors”
- **3rd Place at IBM Watson Hackathon Spring 2018**, Poughkeepsie, NY: “Library Resource Manager”

## SKILLS, LEADERSHIP, AND INTERESTS

- Coursework: Operating Systems, Compilers, Algorithms, Calculus, Linear Algebra, Database Management
- Languages: Proficient {Java, Python, Bash, JavaScript, HTML & CSS}, Prior Experience {C, C++, Groovy, SQL}
- Leadership: **CS Teaching Assistant**, Previous {**President** of Marist College Computer Society, Marist College **Multicultural Community Advisory Board**, Philosophy **Tutor**, **Assistant Leader** of Sycamore Camp}
- Interests: Rock Climbing, Piano (learning), Hiking (mostly trails), Baseball, Running, Automating, Mentoring