John "Jack" Hagen

jjhags@gmail.com | linkedin/jack-hagen-76580b293 | www.hagen.rip

Education

University of Wisconsin – Eau Claire | Eau Claire, WI
09/2023 – Anticipated Graduation: 05/2027
Bachelors of Science - Computer Science / Political Science
Certificate – Chinese || GPA 3.4/4.0

Waukesha County Technical College | Waukesha, WI
8/20/2022 - 5/20/2023
Relevant coursework: Cisco Switching and Routing, Linux Essentials, Enterprise Clients, Security 1, Bash Shell Scripting

Experience

Undergraduate Researcher | UW Eau Claire
9/10/2023 – Present || 10 hrs/week
Worked on and still work on multiple research projects including, but not limited to, machine learning detection of network intrusions, breaking current phishing systems methodology with generative AI, and tracking a real-life moving target using Bluetooth Low Energy emissions from everyday devices.

System Administrator | UW Eau Claire HPC Center
9/10/2023 – Present || 15 hrs/week
Part of the three-person team at the UWEC High Performance Computing Center which manages our two Linux supercomputing clusters. Assist the several hundred students and faculty researchers which use the clusters, ensure that all of the many parts of the clusters are up-to-date, functional, and usable. In charge of security related management of the clusters

Student Intern Lead | Oconomowoc Area School District
06/1/2022-09/01/2022 | 07/01/2023 – 08/25/2023 || 30 hrs/week
Lead a team of other students in preparing the school district's technology for the school year, as well as helped IT department engineers configure Cisco switches and other networking equipment.

Volunteer Attendant | Oconomowoc Public Library
6/10/ - 8/01 | 2017 – 2022 || 1 hr/week
Managed a booth for instructing summer reading program participants and distributing prizes.

Volunteer Special Olympics Bocce Ball Coach | YMCA
07/1/2022-08/01/2022 | 07/01/2023 – 08/02/2023 || 1.5 hrs/week
Assisted and taught disabled players to practice and compete in the Special Olympics.

Research Projects

IoT ML Network Traffic Classification
Use new machine learning algorithms with established network traffic datasets to better classify network traffic as benign or malicious.
 = Python, Machine Learning, Data Science

Generative AI Phishing Detection
Building a dataset of generative AI written phishing messages which defeat current phishing detection methods in order to provide data on how to improve those systems, specifically against the rise of generative AI.
 = AI, LLMs, HPC, Bash, Linux, Python, NLP

Bluetooth Triangulation Tracking Network
Creating a tracking grid of edge devices which uses Bluetooth Low Energy triangulation of a target's personal devices to track them in order to investigate potential mitigation.
 = Bluetooth LE, Embedded Systems, Linux, Python

Skills

Professional Proficiency
- Linux
- Python
- Bash
- High Performance Computing

Working Proficiency
- Git
- Machine Learning
- HTML/CSS
- Javascript
- Java
- Docker / Podman
- Embedded Computing
- Cyber Intelligence
- Network Security
- Data Science

Awards + Certifications

CompTIA Security+ - *10/02/2023*

Recorded Future Intelligence Fundamentals - *04/2024*

IT Specialist – Cybersecurity - *9/28/2022*

Cisco Certified Support Technician Cybersecurity - *3/19/2023*

Future Business Leaders of America Coding and Programming Competition State Winner – *3/18/2023*

Getting Started with Threat Intelligence and Hunting (IBM)- *12/2023*

Organizations

University of Wisconsin – Eau Claire Honors Program

President - UWEC Model United Nations

President – UWEC Cybersecurity Club

President - Students Association of Computing Machinery

American International Ki Development and Philosophical Society – Wadokai Aikido Martial Arts

Blugold Marching Band