

NATHANIEL NYSTUEN

3542 133rd Lane Northeast ♦ Ham Lake, MN 55304
900 Vine Street ♦ La Crosse, WI 54601
nnystuen@outlook.com ♦ [linkedin/nathaniel-nystuen](https://www.linkedin.com/in/nathaniel-nystuen) ♦ (763)-479-9716

EDUCATION

University of Wisconsin-La Crosse

May 2026

B.S. in Computer Science, Cybersecurity Emphasis
Minor in Mathematics

Member of IEEE Student Chapter
Member of National Society of Leadership and Success
Overall GPA: 3.55

PROFESSIONAL EXPERIENCE

Xcel Energy

May 2025 - Present

Senior Technical Intern

Minneapolis, MN

- Supported NERC CIP compliance by organizing audit evidence and tracking remediation tasks
- Maintained and updated compliance checklists to ensure consistent control verification
- Reviewed internal AI chat clients for potential use in workflows, with a focus on data security and access control
- Assisted with asset decommissioning, ensuring systems were properly documented and securely removed

Russel Williams

October 2022 - August 2024

Crew Leader

Plymouth, MN

- Led a small crew completing residential and commercial home improvement jobs
- Mentored new hires and helped them get up to speed quickly on team workflow and safety
- Planned daily jobs and routes to keep work on schedule across multiple locations
- Handled on-site problems, troubleshooting issues to keep work on track and clients satisfied

PROJECTS

ARP Spoofing Attack Simulation

C, Linux, Raw Sockets, Openstack

- Built low-level networking tools in C using raw sockets (PF_PACKET) to construct Ethernet and ARP frames
- Implemented ARP spoofing by crafting forged ARP replies to redirect network traffic
- Developed and tested these low-level programs on Fedora VMs in an OpenStack environment

Secure Multi-User Chat System

C, Bison, Flex, Linux, Cryptography

- Built a secure multi-user chat system in C using privilege separation to reinenforce access control
- Implemented encrypted client-server communication using TweetNaCl to protect messages
- Developed an event-driven server with poll() and enforced permissions using Unix groups
- Implemented a command parser with Flex/Bison and integrated pipe-based IPC between processes

TECHNICAL SKILLS

Computer Languages

C, Java, Bison, Flex, Shell, Assembly (x86), SQL

Protocols & APIs

TCP/IP, Sockets, REST

Web Development

HTML, CSS, JavaScript, JSON, XML, DOM

Tools & Platforms

Git, OpenStack, Wireshark, Mongoose, TweetNaCl

Databases

MySQL, SQLite (basic)