Nathaniel Wert

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Linkedin   **Portfolio**

Education

Georgia Institute of Technology - Computer Science   **Atlanta, GA**
August 2021 - Current   **GPA: 4.0**
- Candidate for Bachelor of Science in Computer Science
- Intelligence and Devices Concentrations

Experience

Kudelski Security - Fall 2022, Summer 2023
Software Engineering Co-op
- Designed a patentable IOT development as part of a team
- Worked with the internal Dev-Ops team to build and improve tools emphasizing a secure development lifecycle
- Developed software applications as part of a world-wide development team
- Spearheaded the development of an open source project that became the subject of a talk at 2023's Black Alps Cybersecurity Conference (YouShallNotPass - https://github.com/kudelskisecurity/youshallnotpass)

Robocup (Robojackets) - Fall 2021 - Present
Programmer / Software Team Member / Firmware Team Leadership
- Designed and implemented an inter-agent communication system based on the TCP/ID Network Standard allowing our robot's to pass for the first time in over 3 years
- Placed 5th in the Bordeaux International Robocup SSL Division B Competition
- Spearheaded a major firmware rewrite following a switch in microcontrollers

Projects

Open Source Security Foundation Scorecard - Software Security Scanner - https://github.com/ossf/scorecard
Open Source Contributor
- Added support for GitLab repositories, significantly increasing the client coverage possibility
- Received the Google Open Source Peer Bonus Award for contributions

NComm - Rust-Based Ros Noda-Based Communication Alternative - https://github.com/N8BWert/ncomm
Lead Developer + Visionary
- Developed a highly efficient alternative to Ros's Client-Server and Publisher-Subscriber communication methods utilizing modern message passing multi-threaded synchronization
- Achieved significant performance improvements over Ros and Ros2

Skills

Programming: Rust, C++ (ROS2), Go, Python (Django, Pytorch, Flask), Swift (SwiftUI), Bash
Frameworks & Tools: Django, Pytorch, SwiftUI, ROS2 (Foxy), Git, Rocket, RTOS (RTIC, FreeRTOS)
Awards: Google Open Source Peer Bonus