Scott Sikorski

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Education

University of Rochester, *BS in Computer Science* *2019 – 2023*
University of Virginia, *MS in Computer Science* *2023 – 2025*

Work Experience

Northrop Grumman
Software Engineer Intern – Secret Clearance *June 2024 - Present*

- Rapidly developed Scion USV payload full stack embedded software for electronic warfare
- Integrated operator HITL target detection from UI dashboard for mission correctness and safety
- Designed Linux Docker system to provide multiple consistent, isolated, and scalable Scion nodes

Garmin *Summer 2022 & 2023*
Software Engineer Intern

- Built 12 new sport profiles and integrated 3 new autonomous features for existing ski activities
- Built unit tests with GoogleTest for 10 transition animations and 25 watch faces to verify UI
- Developed 5 new widgets in graphics library for new AMOLED display

University of Rochester and UR LLE *June 2021 - May 2023*
Research Assistant

- Built Quiet Direct Simulation using CUDA for NVIDIA GPU for fast, low-noise fluid simulation
- 2000% improvement for 3d scenario over C++ CPU achieving below 1ns per particle per timestep

Extracurricular and Leadership

Division 1/Division 3 Cross Country & Track and Field Team *2019 - 2025*

- Team Captain 2021 – 2023
- 3x Academic All-American, 3x D3 1500M All-American, 2x ACC Academic Honor Roll

Teaching Assistant - *Mobile App Development, Software Analysis* *2021 – 2024*

Projects

Total Running – Cross platform running app to track, plan, and thrive on your runs

- Features: weekly run log with Garmin API, calculator, feed of friends, goals, personalized metrics
- Used Firebase for backend NoSQL database and user authentication
- Deployed self-trained running metric AI models on personal Pi server using Flask and REST APIs

Reinforcement Learning for Mobile Robot Task and Motion Planning

- Developed and Trained Double Deep Q-Network with PyTorch for complex sequential tasks
- Optimal task path found for up to 15 sequential movements/actions and <1% failure rate

Technical Tools & Other

Programming Languages: Python3, C++20, C#, C11, CUDA-11, Kotlin, Dart, Rust
Frameworks: Flutter, Flask, .NET 8.0, PyTorch, TensorFlow, Docker, MongoDB, PostgreSQL, Jenkins
Native English Speaker, Working French Proficiency