# Noah Pragin

npragin@gmail.com | www.noahprag.in | linkedin.com/in/npragin | github.com/npragin | (408) 655-8625

## EDUCATION

## Oregon State University

Corvallis, OR

B.S. Computer Science, Major GPA: 3.8

Expected Jun. 2026

• Teaching Assistant for Machine Learning, Intro to Computer Science II

#### EXPERIENCE

### Software Engineer Intern

Jun. 2025 - Sep. 2025

Anduril Industries Atlanta, GA

- Architected safety-critical behavior trees from ground-up for UAV autonomy, contributing 30% of foundational codebase implementing mission behaviors, fail-safe modes, and concurrent task execution
- Delivered contract-critical autonomy fixes through intensive field debugging, ensuring readiness for high-stakes customer demonstration
- Developed state management system for autonomy meeting <10ms constraints, enabling coordinate frame transformation and time-synced fetching while eliminating duplicate computations across behavior trees.
- Implemented embedded Rust middleware enabling command translation and state synchronization between autonomy and autopilot systems.

#### Undergraduate Research Assistant

Sep. 2024 – Present

Collaborative Robotics and Intelligent Systems Institute

Corvallis, OR

- Enhanced apple localization accuracy by 20% on an autonomous agricultural robot by optimizing Kalman filter measurement and state models.
- Implemented point cloud DNN architectures and executed experiments investigating real-to-sim transfer performance for robotic pick-and-place tasks.
- Reduced iteration time by 90% by developing ROS infrastructure that parameterized the policy-robot interface and enabled drag-and-drop TensorRT deployment, eliminating manual configuration.

#### Software Engineer Intern

Jun. 2024 – Sep. 2024

SiFly Aviation

Santa Clara, CA

- Contributed to SiFly's world record 3+ hour electric drone flight, delivering software across the full software stack in a startup environment.
- Designed and programmed 30+ RESTful API endpoints within 3 weeks using Django, establishing the foundation for user management, drone onboarding, and campaign management to meet aggressive MVP deadlines.
- Established an on-board network benchmarking service to monitor latency, bandwidth, and signal strength, driving a 30% increase in mission-critical data flow consistency.
- Implemented user authentication middleware for Janus, a video conferencing WebRTC server, enhancing security and eliminating unauthorized access incidents.

#### **Autonomous Systems Engineer**

 $Feb.\ 2024-Present$ 

Global Formula Racing

Corvallis, OR

- Built ROS infrastructure for an autonomous racecar deployed to international competitions, coordinating system integration across 8 subsystems including SLAM, path planning, and sensor fusion.
- Enabled 15% localization accuracy improvement by implementing data alignment pipelines between SLAM and sensor fusion systems.
- Reduced troubleshooting time by 40% by migrating from scattered terminal logs to centralized Foxglove diagnostic nodes across all 8 autonomous vehicle subsystems.

#### PROJECTS

**Learning-Based Docking** | NVIDIA Isaac, PyTorch, Gymnasium github.com/npragin/learning-based-docking

• Engineered environment and evaluated reinforcement learning policies for autonomous underwater vehicle docking

### TECHNICAL SKILLS

Languages: Python, C++, C, Rust, JavaScript, TypeScript, Java

Frameworks: ROS, PyTorch, NVIDIA Isaac, React, Django, Next.js, Node.js, Express.js

Developer Tools: AWS, Docker, Jenkins, MySQL, PostgreSQL, Terraform, GStreamer, Git, Agile (Scrum)

Libraries: NumPy, scikit-learn, TensorRT, Matplotlib, JUnit, Jest, Styled Components, JoyUI