

Andrew R. Noble

Robotics engineer with fullstack software and AI skills

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EXPERIENCE

Contracts, Learning, Startups, May 2023 - Current

- Post-Tortuga, I took time off to deepen software skills and manage 2 knee surgeries
- Self-directed study: Udemy web development course, 12 projects on Github, 4 of them deployed
- Startups in EdTech: I've explored creating interactive STEM diagrams with AI for STEM education
 - Built and deployed 4 different web-based learning tools
 - One project received 3K+ visits, led to conversations with educators and inbound investor interest
 - Gained experience in user research, rapid prototyping, and shipping independently.
- Funded by contract stints at REI (Sales, Jan–Aug 2024) and Alyeska Pipeline Service Company (Drafter, Sep 2024–Jan 2025), where I automated drafting processes with Python and AutoLisp.

Robotics Engineer, Tortuga AgTech — Denver, CO, Oct 2021 - April 2023

- Developed ROS2 node in Python that diagnoses end-effector HW, reduces debug time from 30 to 3 mins
- Developed ultraviolet fungi treatment, offering customers new chemical-free fungicide service ([video](#))
- Fixed fleet-wide slip-ring comms failure, enabling record 2x 1000 kg harvest days
- Extensive robot troubleshooting, bring-up, and repair through entire tech stack
 - *Mechanical*: cable pinch damage, bent arms, motor replacements + calibration
 - *Electrical*: faulty PCBs, unreliable connections, ground shorts
 - *Software*: misconfigured software, docker container deployment of ROS2-based robots
- Managed California site for 9 weeks, keeping fleet 80%+ healthy while harvesting 3x/week

Field Robotics Engineer Intern, Tortuga AgTech — Santa Maria, CA, Summer 2020

- Conducted software release and feature tests, communicated results to software team

Mechanical Engineering Intern, Coffman Engineers — Anchorage, AK, Summer 2019

- Developed pipeline loading estimates per environmental constraints on AK's northern oil fields

EDUCATION

Master of Science, Robotic Systems Development, Carnegie Mellon University — 2025 - 2027

Bachelor of Science, Mechanical Engineering (Mechatronics), California Polytechnic State Univ., SLO — 2021

- GPA: 3.8

SOFTWARE PROJECTS (12+ more on github)

Circuit Tutor

- React/FastAPI application that can explain and generate electrical circuits: circuit-tutor.xyz

Physics Viewer

- React/FastAPI application that can tutor introductory physics using free body diagrams: physicsviewer.com

Fermi Chain

- React + tailwind application for practicing estimation skills. Attracted 3500 unique site visits

SKILLS

- React (Typescript), python, C, linux command line
- Git, github actions, ROS2, docker, postgresql
- Mechanical design with Solidworks, OnShape, Fusion360
- Electrical debugging, repair, crimping, soldering