Alex Eagan

Cell: +1 (907) 419-7761   LinkedIn: https://www.linkedin.com/in/alex-eagan/   Email: aje58@cornell.edu

EDUCATION

Cornell University, College of Engineering, Ithaca, NY   **August 2020 - May 2024**
Bachelors of Science, Mechanical Engineering   GPA: 3.974

PROFESSIONAL AND RESEARCH EXPERIENCE

Contract Mechanical Design Engineer, GoRaqt   **Aug. 2024 – Nov. 2024**
- Single-handedly designed the mechanical systems enabling a kiosk that will serve to rent and return tennis and pickleball rackets from five manufacturers, as well as have a locker and ball dispensing system
- Worked closely with an aesthetics team, software engineer, and customers to ensure all needs were met

Cornell University Autonomous Sailboat Team Lead, Cornell   **Feb. 2021-Jun. 2024**
- Led a team of ~25 people consisting of CS, Business, and Mechanical Operations students who design and build an autonomous sailboat each year to compete in the International Robotic Sailboat Regatta
- Designed and built a keel connection and hull, using a variety of tools and manufacturing techniques
- Compiled a 20+ page technical report detailing work done each semester; design requirements, in depth design reviews, manufacturing processes, and future work
- Directed the design of a new hull for the sailboat with six members, including a remote member

Research Intern, Technical Service Center, Bureau of Reclamation.   **Jun. 2022-Aug. 2022**
- Ran, collected data, and analyzed data from scale physical models of dams:100ft+ and $1+ million value
- Completed a design assessment for a desander on a dam that supports over 350,000 people and $1 billion annual value crop production

Undergraduate Researcher, The Reed Group, Cornell University   **Jun. 2021-Oct. 2022**
- Focus on the Borg Multi-Objective evolutionary algorithm for water resource optimization between variables such as economic feasibility, overtop probability, and ecological risks

TEACHING AND OTHER EXPERIENCE

Learning Studios Developer, Cornell University   **Jun. 2024-Aug. 2024**
- Developed pedagogy and activities for the Mechanical and Aerospace Engineering Curriculum, serving over 180 students yearly
- Designed and produced a hands-on activity teaching motor selection in the context of laser alignment

Mechatronics Teaching Assistant, Cornell University   **Jan. 2024-Jun. 2024**
- Led a weekly lab section of over 20 students teaching practical circuit designing, building, debugging, and analysis and instrumentation skills (oscilloscope, etc.)
- Provided learning support for theoretical and practical material (circuits, sensors, microcontrollers, actuators, etc.)
- Received the Undergraduate Teaching Award

Cornell Engineering Leadership Certification Program   **Jan. 2022 – Dec. 2022**
- Participated in the year-long, highly selective project-based program that focused on maximizing my ability to make an impact using my unique strengths

Caving Instructor   **Fall 2023**
- Taught new cavers all techniques needed to navigate three cave expeditions

SKILLS

Software	Technical	Professional + Teaching
CAD (4 programs)	3D Printing and Laser Cutters	Teamwork
LabView	Composite Layups	Public Speaking
Advanced: MATLAB	Metal and Woodworking	Communication
Intermediate: Python, R, C	Soldering	Empathy