Cooper Proctor

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EDUCATION

Cornell University Ithaca, NY

Bachelor of Science in Computer Science

Expected May 2026

- **GPA:** 3.6 / 4.0 | Consistently recognized on the Dean's List (3x)
- Study Abroad: DIS, Denmark, Fall 2024
- Relevant Coursework: ANNs and Deep Learning, Cognitive Neuroscience of Sleep, Behavioral Neuroscience, 3D Computer Graphics Applications, Functional Programming, OOP, Data Structures
- Organizations: Cornell Concrete Canoe, Cornell Hyperloop, Climb Club, Taekwondo Club, Hacking Club

WORK & LEADERSHIP EXPERIENCE

SGM Inc.

Glenwood Springs, CO

May 2024 – August 2024

- Data Science and Water Resources Intern
- Developed SQL database to streamline construction cost estimates and SOVs, reducing time to generate and deliver (~5%) more accurate reports to clients by approximately 25%
- Designed and presented 3 interactive dashboards incorporating interactive ArcGIS maps and live alerts, enhancing user insights on geospatial water data trends across western Colorado, resulting in reduced decision-making time by over 30%
- Implemented 2 new GUIs to streamline water engineering data processes in AutoCAD Plant3D, reducing time to construct BOMs and upload and edit data by more than 50%

Department of Computer Graphics, Cornell University

Ithaca, NY

Undergraduate Research Assistant – Donald Greenberg's Lab

Jan 2024 - May 2024

- Developed a physics-based, free-hand virtual grasping tool adaptable to more than 30 virtual objects, utilizing VR headset cameras to track key hand points and simulate precise interactions with 3D objects
- Integrated efficient AR/VR graphics technologies to recognize hand positions in space and apply real-time physics forces upon contact with objects, eliminating the need for physical gloves

Department of Psychology, Cornell University

Ithaca, NY

Undergraduate Research Assistant – Shimon Edelman's Lab

Sept 2023 - Dec 2023

- Engineered an artificial babbler from existing models of muscles in the mouth to generate syllabic speech
- Implemented CNNs to learn from turn-taking behaviors in infant conversations, contributing to research on neurological disorders and improving model accuracy by ~10%
- Transitioned ML model from MatLab to PyTorch to improve accessibility and efficiency
- Analyzed and annotated 30 recordings of turn-taking interactions between infants and caregivers for analysis

2022 Big Ideas Competition First Place (LAFT)

Ithaca, NY

Co-Founder

Oct 2022 - Nov 2022

- Co-founded LAFT, a lost-and-found startup, to build a trust-based system for recovering lost items
- Awarded 1st place in Social/Climate Track out of 12 finalists at the Cornell 2022 Big Ideas Competition
- Granted \$2,000 in seed-funding to further develop LAFT with co-founder
- Entered to compete in National Round against teams from schools across the country

SKILLS, ACTIVITIES & INTERESTS

Projects: *Ocamon* – built with OCaml, *Floppy Fish* – built in Unity with C#, *Planetoids* – built with Python **Technical Skills:** Python, SQL, Java, C#, JS, OCaml, C++, C, IntelliJ, VSCode, Git, Figma, Pandas, PyTorch **Events:** 2024 Aspen Ideas Festival Volunteer, Big Red Hacks 2022/2023, Cornell 2022 Big Ideas Competition **Interests:** bioethics, neuroscience/psychology, skiing, climbing, mountain biking, running, ice baths, mapping