

Soren Lera

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198 College Hill Rd
Clinton, NY, 13323

Education:

Hamilton College, *Bachelor of Arts*, Clinton, NY; May 19th, 2027

Intended Major: Computer Science / Intended Minor: Mathematics / GPA: 3.87

Relevant Experience:

Hamilton Innovation Lab Fellow, **Hamilton College**, Clinton, NY; July–August 2025

- Spearheaded and developed a furniture trading app from scratch during a competitive entrepreneurial fellowship (stipend: \$1,500); conducted user discovery, defined MVP scope, and shipped a functional prototype in 2 weeks

Undergraduate Researcher, **Prof. Morrison Smith**, Hamilton College, Clinton, NY; May 2025–Present

- *Pectogram*: Architected and deployed "Pectogram," a full-stack web app (React/Node.js) that enables nonverbal autistic users to communicate with untrained peers via LLM integration. Shipped from zero in 1 month; demo published at ACCESS conference.
- *Drive Groups*: Led qualitative user research with faculty, employing reflexive thematic analysis to derive insights that extended a prior research publication.

Qoom Software Intern, **QOOM**, Remote; Spring 2024–Present

- Built and shipped AI-powered web tools to scaffold learning for new developers. Made strategic trade-offs between feature scope and deployment speed to deliver iterative value.

Digital Initiatives Intern, **LITS Department**, Hamilton College, Clinton, NY; January 2025–Present

- Owned end-to-end development of a custom faculty website to showcase interdisciplinary video essays, translating complex project requirements into a clean, maintainable web experience.
- Built an immersive VR experience in Unreal Engine to digitally preserve and recreate a historical Japanese silent film theater, solving spatial and interactive design challenges.

Undergraduate Researcher, **Prof. Dong**, Hamilton College, Clinton, NY; August 2025–Present

- Engineered performance optimizations for Apache Flink's distributed processing engine by designing and analyzing CPU scheduler experiments in CloudLab, directly extending graduate-level research.
- Prototyping integration of ML inference layers to create intelligent, adaptive CPU schedulers, exploring the intersection of systems programming and AI.

IT Support Specialist, **Help Desk**, Hamilton College, Clinton, NY; October 2024–Present

- Diagnosed and resolved complex technical issues for a diverse campus community, building deep empathy for end-user frustrations and developing clear communication skills.

Skills:

Languages: JavaScript, Python, C++, Java, Ruby, Rust, Clojure, Scheme, Prolog, Assembly

Stack: React, Vue.js, Node.js, Python (Flask/Django), HTML/CSS, Tailwind, Responsive Design, REST APIs, Express

Databases: PostgreSQL, MongoDB, Firebase

Machine Learning: Scikit-learn, TensorFlow, PyTorch, Generative Adversarial Networks, Linear & Logistic Regression, Naive Bayes Classifier, Unsupervised & Supervised Learning

Tools & Platforms: Git/GitHub, Docker, DigitalOcean, Jupyter Notebook, Apache Flink, Cloudlab, Remote Linux Servers, Command Line, PowerShell

Research Methods: Qualitative Coding, Reflexive Thematic Analysis, Affinity Diagramming, User Study Design

Honors/Awards:

Global Finalist at the Conrad Challenge, April 29th, 2020

- Awarded Global Finalist with Team Lucidity at a startup competition with a machine-learning productivity manager app, out of over 600 teams competing globally.