Kristian Praizner

+1 (484) 803-3768 | krisp@mit.edu | kristianpraizner@yahoo.com | kristianpraizner.com

Education

Massachusetts Institute of Technology (MIT) *September 2022 - May 2026 (expected)*
Degree: *Cambridge, MA*
Bachelor of Science in Artificial Intelligence & Decision Making
GPA*:* 4.4/5.0

Select Technical Coursework: Natural Language Processing, Algorithms & Data Structures, Machine Learning, Computational Cognitive Science, Robotic Manipulation, Linear Algebra, Signal Processing, Computer Graphics
Activities: Track & Field (All American), Buddhist Society, Sundai Club

Skills

Programming: Python, C++, C, Rust, TypeScript, WebPPL, HTML, CSS
AI/ML: PyTorch, scikit-learn, Sentence-BERT, OpenAI API, LLM evals, retrieval
Systems: Linux, FastAPI, asyncio, libp2p, Electron, PyInstaller
Data: NumPy, SciPy, pandas, Matplotlib
Languages: Estonian (native), English (native)

Work Experience

SINTEF- *Summer Intern* June 2025 - August 2025

- Built production-style Python pipelines for ingesting, denoising, and visualizing multimodal drone sensor data for UXO detection.
- Evaluated magnetometer, GPR, gamma-ray, and imaging payloads to improve detection performance and operational decision support.
- Packaged the end-to-end toolchain into a distributable desktop software suite with PyInstaller for researcher use.

MIT Decentralized Currency Initiative - *Research Engineer* January 2025 - Current

- Built Python APIs and data pipelines for Bitcoin mempool and hashrate research, supporting empirical modeling of transaction fees and network dynamics.
- Developed ML-based fee estimation workflows on node-collected transaction data, including feature engineering, evaluation, and visualization for large-scale blockchain datasets.
- Translated research ideas into usable internal tools and web-facing demos for simulation and analysis.

CERN - *Summer Intern* June 2024 - August 2024

- Developed simulations for the W-boson mass measurement for future particle colliders.
- Utilized in-house computer clusters with C++ and ROOT to run and graph simulations and optimization techniques.
- Contributed to a key measurement technique for future colliders, enhancing the precision of W mass measurement by 40%. Presented work in a national physics conference.

Domino's Pizza- *Assistant Manager* September 2019 - May 2022

- Navigated through time pressured environments in every part of the pizza-making process.
- Worked through the Covid-19 pandemic as an essential worker.

AI & Systems Projects

RLM - Recursive Language Models - *Python, OpenRouter API, Sentence-BERT*

- Built a modular framework for long-context LLM agents with swappable partitioning, retrieval, and execution strategies.
- Designed an ablation/evaluation harness to compare accuracy, latency, and token cost across configurations on OOLONG and LoCoDiff.
- Implemented async parallel recursion and structured answer stitching to improve wall-clock performance in multi-stage LLM pipelines.
- Open-sourced at https://github.com/Krisp140/recursive-llm

AIA - Agentic Communication Protocol - *Libp2p (Go), Typescript*

- Built a decentralized communication protocol for AI agents on libp2p, including message-passing and coordination primitives for multi-agent workflows.
- Developed a TypeScript/React/Electron interface to visualize and interact with agent communications.
- Won Gold Prize in MIT AI Venture Studio.
- https://aiainterface.com

Targeted Nakamoto - *Python (streamlit), Linux (hosting)*

- Built a working API demonstration for a bitcoin hashrate control algorithm simulation.
- Developed a web interface for users to interact and test potential hashrate outcomes by controlling block reward.
- Deployed application on MIT's internal research servers.
- https://targetednakamoto.com/About

AI Assisted Fruit-Sorting Bot - *Python (Drake), PyTorch*

- Developed full-stack robot simulation to identify, grasp, move, and sort fruit in a factory setting.
- Vision system utilized a Mask-RCNN model to identify the fruits with a 93% success rate despite limited training data and only one camera system.
- Presented video work and formal write-up at a robotics conference.

AI Symptom Checker - *Next.js, HTML, OpenAI*

- Built a full-stack LLM application in Next.js for symptom intake and model-assisted diagnostic triage.
- Integrated model API calls, prompt logic, and front-end UX to translate free-text input into structured outputs.

Lisp Interpreter - *Python*

- Developed tokenization and parsing functions for a dialect of the Lisp language and python functions to evaluate Lisp inputs
- Programmed Python functions to declare and enclose Lisp environments, use booleans and conditionals in Lisp, and implement lists in Lisp using the linked list data structure**.**