

Milo Knowles

SOFTWARE ENGINEER / FOUNDER

Cambridge, MA

Mission-driven engineer and founder with 5+ years of experience at early-stage climate startups. While my technical background is in robotics, machine learning, and full-stack development, I'm broadly interested in climate, agriculture, and applications of AI that improve human well-being.

WORK EXPERIENCE

Senior Software Engineer / [Synonym Bio](#)

MAR 2024 – PRESENT

Designed and built Synonym's Scaler product – a process simulation and techno-economic assessment tool for the biomanufacturing and other industrial processes.

Co-Founder / Food for the Future

JAN 2022 – DEC 2023

Built a software platform for tracking food emissions from purchasing data, carbon calculator for individuals. Helped develop Verra's sustainable food methodology, and funded 3 pilot projects with K-12 school partners.

Software Engineer / [Singularity Energy](#)

FEB 2022 – MAY 2023

Lead development of forecasting algorithms, data API, and utility dashboards.

Founder / Blue Meadow

AUG 2020 – DEC 2021

Accepted into the BlueSwell startup incubator in Boston. Developed a hardware and software prototype for data-driven ocean farming.

Software Intern / [Skydio](#), [Optimus Ride](#), [Adaviv](#), [Kespry](#)

2017 – 2019

Skydio: Developed the first prototype of enterprise "3D Scan" software. Optimus Ride: Developed computer vision tools for autogenerating maps from LiDAR.

EDUCATION

Massachusetts Institute of Technology / M.Eng, Artificial Intelligence

2019-2020

M. Knowles, V. Peretroukhin, W.N. Greene, and N. Roy, "Toward Robust and Efficient Online Adaptation for Deep Stereo Depth Estimation," in International Conference on Robotics and Automation (ICRA), 2021.

Massachusetts Institute of Technology / B.S, Computer Science

2015-2019

CODING LANGUAGES

Python, Typescript, Javascript, C++, C#, SQL, CSS, Matlab, R

FULL-STACK WEB

Next, Tailwind, React, Redux, PostgreSQL, FastAPI, Terraform, AWS, GCP, Docker, Figma, Webflow, Canva

AI / ROBOTICS

PyTorch, pandas, numpy, xarray, OpenCV, NeuralProphet, ROS, GTSAM, LCM, Unity3D

COURSEWORK

- Applied Machine Learning
- Optimization for ML
- Algorithms for Inference
- Biomolecular Feedback Systems
- Introduction to Compbio
- Advances in Computer Vision
- Computational Photography
- Robotics: Science and Systems
- Principles of Autonomy and Decision Making
- Design and Analysis of Algorithms
- Computation Structures
- Computer System Engineering
- Linear Algebra
- Calculus I/II
- Differential Equations
- Physics, Chemistry, Biology, Astronomy

WRITING SAMPLES

[Future Food #4: Indoor agriculture](#)

[Future Food #3: The unreasonable effectiveness of plants](#)

[Future Food #2: Artificial photosynthesis](#)

[Idea Compass #4: Loonshots](#)

[How should companies and individuals fund climate action?](#)

[What is consumed carbon intensity, and why is it important?](#)