Milo Knowles

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WORK EXPERIENCE

[Roebling](#) – *AI-powered development stack for industrial infrastructure* — **June 2025 – Present**
Co-Founder & Lead Software Engineer — *Remote*
- Responsible for product development, platform architecture, and managing a team of 3 software engineers.
- Stack: React/Typescript, Tailwind, Python/FastAPI, PostgreSQL, Supabase, Vercel, Langchain, PyTorch

[Synonym](#) – *Biomanufacturing infrastructure and scale-up support* — **April 2024 - June 2025**
Founding Software Engineer — *Remote*
- Architected and built Scaler, a process simulation and techno-economic assessment tool for biomanufacturing.
- Led product from idea to first revenue. Delivered 4 projects to a F500 customer, made key engineering hires, and ran investor demos. Helped enable a Series A and spinout of the product as "Roebling" (see above).
- Stack: React/Typescript/Next.js, Python/FastAPI, PostgreSQL, Supabase, Vercel

Food for the Future – *Carbon crediting for sustainable food* — **Jan 2022 – Dec 2023**
Co-Founder & CTO — *Remote*
- Built a platform for tracking food emissions based on purchasing data and calculating user carbon footprints.
- Collaborated with Verra to develop a sustainable food methodology and funded 3 pilots at K-12 schools.

[Singularity Energy](#) – *Data platform for tracking grid emissions* — **Feb 2022 - May 2023**
Software Engineer — *Somerville, MA*
- Led development of Singularity's grid forecasting product, data API, and utility dashboards
- Stack: React/Typescript, Python/FastAPI, PostgreSQL, Terraform, AWS

[Skydio](#), Optimus Ride, Adaviv, Kespry – *Various autonomous robotics companies* — **2018-2019**
Software Intern – Autonomy / Perception — *Redwood City, CA / Boston, MA*
- Skydio: Developed the first prototype of the "3D Scan" product (C++/Python).
- Optimus Ride: Developed computer vision tools to autogenerate lane and curb maps from LiDAR scans (C++).

EDUCATION

Massachusetts Institute of Technology — **2019 – 2020**
Masters of Engineering, Artificial Intelligence ([Paper](#)) — *Cambridge, MA*

Massachusetts Institute of Technology — **2015 – 2019**
Bachelor of Science, Computer Science — *Cambridge, MA*

CERTIFICATIONS, SKILLS & INTERESTS

- **Languages:** Python, Typescript/Javascript, C++, C#, R, Matlab
- **Web:** React/Next.js, Redux, Tailwind, FastAPI, PostgreSQL, Terraform, Supabase, Vercel, AWS, GCP
- **AI/Robotics:** C++, PyTorch, OpenCV, ROS/LCM, GTSAM, Unity3D, PydanticAI
- **Skills:** Full-Stack Web, AI/ML, Robotics, Computer Vision, UI/UX Design, Startups
- **Interests**: Triathlon, Type 2 fun, [writing](#)