Lucas Niewohner

Herman, NE, 68029 and Golden, CO, 80401
linkedin.com/in/lucas-niewohner lucasniewohner.com

Summary

I am a roboticist, data scientist, communicator, experimenter, and applied developer with extensive startup experience. I'm passionate about forming relationships, focusing on the big picture, testing in the field, and helping people via technology. I'm looking to help an innovative team do Robotic Perception, 3D Reconstruction, and/or Data Science.

Recent Experience

Field Engineering Intern
Scythe Robotics

2025-now
Longmont, CO

- Reworked robot data infrastructure in Rust to facilitate "Log Queries" to extract data for Data Science and debugging
- Democratized access to video, GPS data with new UI, allowing support team to diagnose problems without engineer time
- Reduced typical upload sizes by 90-99% (depending on requested data), dramatically reducing LTE, storage costs

Robotic Intelligence Developer
Greenline Autonomy

2024-2024
Herman, NE

- Built real-time, LiDAR-based panel and post detection for specialized Solar Field navigation and obstacle avoidance
- Automatically annotated over 100k images using time-synchronized LiDAR for use in a deep visual network

ROS Robotics Developer
Birdseye Robotics/Hogwash Robotics

2019-2024
Waterloo, NE

- Designed, prototyped, tested in-field, and co-patented a poultry mortality collection system
- Collected data, architected, and integrated Computer Vision models, a SLAM Localization System, BTs, and other techs
- Birdseye secured over a million dollars in investor funding after a successful product demonstration

Robotic Mapping Intern
Stratom Autonomy LLC

2023-2023
Boulder, CO

- Lead a team of 4 to plan, present, develop, and test a ROS2 obstacle detection system which surpassed reliability goals.

Education

B.S. Computer Science – Robotics and Intelligent Systems, Minor in Data Science
Colorado School of Mines

GPA: 3.9
May 2025

Highlighted Experiences: Robotics, SLAM, Machine Learning, Robot Planning, Study Abroad in FR, NZ

Masters in Robotics
Colorado School of Mines

GPA: 4.0
Dec 2025

Knowledge, Skills, Abilities

Technical Skills:
- *Languages:* Python (Expert), Rust, C++, C#, Java, R, HTML, CSS, JavaScript, TypeScript, MySQL
- *Technologies:* Flask, OpenCV, Android Studio, ROS2, ROS2 Navigation Stack, VSLAM, LiDAR SLAM, Behavior Trees
- *Data Science Tools:* SciPy, Scikit-learn, Numpy, Pandas, Geopandas, and Tensorflow with Keras, MS Office, Excel
- *Hardware:* Nvidia Jetson, Intel NUC, Arduino, Raspberry Pi, ESP32, Xbee/LoRa, CAN and other robot hardware

Soft Skills:
- Known for my ability to **mentor** and **explain** via analogies. Practiced at Technical and Professional **Writing**, **Presenting**
- Have demonstrated **adaptability**, **problem-solving**, **teamwork**, and **leadership** when testing on-site, traveling abroad
- Employers have commented that my **confidence**, **work ethic**, and **time management** enable me to quickly solve problems

Honors, Awards, and Extracurricular Activities

- Former FIRST Tech Challenge Robotics Nebraska State Champion, World competitor. Now Volunteer (7 years)
- Developed an Underwater ROV with the Mines Robotics Club using VSLAM and CUDA acceleration (4 years)
- CO Mines Marching Band Percussionist (5 years)
- Machine Learning TA and frequent tutor. Known for my ability to create analogies and communicate difficult topics simply.