Lokesh Sriram

loki.p.sriram@gmail.com | (330) 842-5423| https://www.linkedin.com/in/lokesh-sriram | https://lokichubs.github.io/projects

EDUCATION

Carnegie Mellon University **Pittsburgh, PA**
Masters of Science in Artificial Intelligence Engineering - Mechanical Engineering *Dec 2026*
Coursework: Sensing & Sensors, ML & AI for Engineers, Systems & Toolchains for AI Engineers, Modern Control Theory

Purdue University **West Lafayette, IN**
Bachelor of Science in Mechanical Engineering | *GPA: 4.0/4.0 (Highest Distinction)* *May 2025*
Coursework: Controls I&II, Heat & Mass Transfer, Fluid Mechanics, Modern Physics, Discrete Mathematics, Real Analysis
Honors/Certificates: Minor in Mathematics**,** ASHRAE Scholar, H. William Bottomley scholarship

SKILLS

Controls & Sensing: Model Predictive Control (MPC), Extended Kalman Filter, LabVIEW, VICON, D-Flow
Hardware/Embedded: ESP32, Raspberry Pi, Arduino, Linux, KiCAD, LTSpice, Modbus, Ethernet, PLCs
Programming: Python, MATLAB, C++, Java, ROS2, MySQL
Simulation & CAD: Siemens NX, Fusion 360, SolidWorks, STAR-CCM+, Modelica, Dymola
Machine Learning & AI: PyTorch, Tensorflow, JAX, EdgeImpulse, Apache Spark, Kafka, pgAdmin, GCP
Other: FL Studio 21, ProTools, Machine Edition, Excel, Word, PPT

PROFESSIONAL EXPERIENCE

Graduate Research Assistant **NeuroMechatronics Lab, PA**
Sep 2025 – Present
- Designed a 64-electrode, 9 cm² neural recording grid for intra/post-operative motor-neuron monitoring, reducing system cost compared to existing solutions
- Engineered a custom 64-channel head stage for low noise bio-signal acquisition, including amplification and front-end signal conditioning

Control Systems Research Assistant **Ray W. Herrick Laboratories, IN**
Aug 2022 – Aug 2025
- Developed an MPC framework for V2H energy management that jointly optimized EV charging, HVAC operation, and solar generation to reduce real-time grid load
- Deployed IoT power-sensing system leading to $500 savings over TED Spyder and second author publication to ASHRAE Transactions
- Designed a DC lighting system with a Raspberry Pi/C++ current acquisition module that achieved ~20% energy savings, resulting in a first-author publication at Herrick Conferences 2024
- Built printed circuit boards (PCB) for custom smart switches – allowing for remote control of a 380 V DC bus

Robot Control Systems Research Assistant **TRACE Labs, IN**
Jun 2024 – Dec 2024
- Built data pipeline using motion capture system (VICON) and Treadmill (D-Flow) for robot motion profiles (Digit)
- Developed data loader in Python for TLIO and customized it to reduce motion sensor (IMU) drift by 40 cm per minute

PROJECTS

Clara AI: Founding Engineer **Pittsburgh, PA**
Nov 2025 - Present
- Placed top 15 in Hack-a-Startup competition 2025 out of 48 teams
- Built the computer vision pipeline and Llama-o3 interaction module for a voice-interactive physical therapy agent performing real-time leg extension analysis

Formula SAE: Aerodynamic Design Team **Purdue, IN**
Aug 2022 – Aug 2023
- Mitigated drag by 6% by working on front splitter of FSAE car (validated in STAR CCM+), contributing to an overall 2nd in Michigan races 2022
- Implemented CAM for gantry, water jetting, milling, and laser cutting machines in Fusion 360 to machine molds, rear wing, and main body elements

ParkVue: Startup Pitch Competition **Purdue, IN**
Jan 2023 – May 2023
- Pitched a device using IoT enabled cameras to facilitate and ameliorate real-time parking management and tracking
- Led a team in the John Martinson Entrepreneurial Center (JMEC) Startup Incubator competition and won $10,000