

Luca Rosu

Engineer looking to expand my knowledge of the entire product ecosystem.

6729 Pine Creek Ct
McLean, VA 22101
(240) 728-8232
luca.rosu@gmail.com
www.linkedin.com/in/lucarosu
https://lucarosu.com/

EXPERIENCE

Tesla, Palo Alto — *Hardware Test Engineer*

September 2023 - December 2023

- Led the testing initiative for a critical high voltage connector utilized on Cyber Truck.
- Initiated and executed the design, development, and deployment of degradation tests for pivotal components.
- Identified issues during reliability testing and suggested design adjustments to mitigate part failure.
- Engineered PCBs tailored for the evaluation of new technologies being developed for forthcoming products.
- Developed a method of expediting testing of certain DUTs by over 25% through the use of scripting.

Purdue Electric Racing (SAE), Purdue — *Drivetrain Lead 23'*

August 2021 - PRESENT

- Collaborating with cross-functional subteams to conceptualize, design, and construct a 4-wheel drive vehicle, showcasing out skills
- Actively managing and delegating projects for a team of 10+ individuals in order to design and manufacture the PER 23 drivetrain
- Modeled the stresses acting on a prototype and adjusted the design based on changing design constraints.
- Conducted point simulations to determine optimal gear ratios using Matlab scripts.
- Developed final designs while working around manufacturing and assembly constraints (DFM)/(DFA).
- Formulated practical testing environments to stress-test the drivetrain, corroborate FMEA findings, and spotlight potential weak points
- Addressed unforeseen challenges during comprehensive system tests and individual components evaluations

Daimler Truck, Portland OR — *Functional Vehicle Test Eng.*

May 2023 - August 2023

- Developed data processing scripts to analyze vehicle testing data.
- Supported first ever cross country EV truck trip using public charging
- Used AI to increase route efficiency of next gen electric trucks.
- Participated in comparative testing between next gen EV and diesel truck.
- Worked on state of the art next gen EV and diesel trucks.
- Participated in functional vehicle testing and data collection.

The Looma Project, Durham NC — *Engineering Intern*

May 2022 - August 2022

- Salvaged a significant rollout for a leading US grocer within the initial 48 hours of my internship
- Engineered components optimized for large scale production and deployment
- Engaged with manufacturers to obtain part quotations

EDUCATION

Purdue Mechanical Engineering
West Lafayette, IN - 2021-2025

John Hopkins
Baltimore, MD

Center for Talented Youth
Engineering program. Intensive course in engineering.

SKILLS

Fusion 360, Solidworks, NX, KISSsoft, Ansys FEA, Altium

Java, MATLAB, C, Python

PCB Design

Arduino

Computer Design

3D Printing

CNC Machining

Welding

Jira, Confluence, Asana

Volunteering

SAE AWIM Volunteer Lead
Organised and led a middle school STEM initiative to teach 6th graders about engineering principles. Project involved 100+ students and more than 20 volunteers.

LANGUAGES

English, Romanian, French

