

# 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 — *President 25'*

August 2021 - PRESENT

- Lead the collaboration 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 / Programming

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

