Oscar E. Lares

https://o-lares.github.io/ | oscarelares@gmail.com | 404-952-7607 | www.linkedin.com/in/oscarelares

OBJECTIVE

Seeking a challenging position in a dynamic organization where I can develop my skills in data analysis, machine learning, & data science while contributing to the company's success. Eager to apply my analytical & problem-solving skills to real-world challenges & gain valuable experience in a professional environment.

EDUCATION

Bachelor of Science in **Mechanical Engineering – Kennesaw State University** **May 2019**
Cumulative GPA: 3.78, Magna Cum Laude
Master of Science in **Civil Engineering– University of Georgia** **May 2024**
In progress – Cumulative GPA: 3.65

SKILLS & QUALITIES

Technical: Python, Jupyter Notebook, PyTorch, Pandas, Numpy, Scikit-Learn, Data Cleaning/Mining
Personal: Teamwork, Self-Starter, Innovative, Curious, Communicative, Analytical, Bilingual (Spanish)

RELEVANT PROJECTS

Traffic Crash Safety Analysis – UGA **May 2023 – August 2023**

- Compiled and cleaned and scraped data from 4 different sources to be used in modeling to assess traffic crash risk severity
- Leveraged PCA and Ordinal Logistic Regression modeling to obtain insights on risk factors associated with crash severity
- Led the efforts on writing a research paper compiled with our methodology and findings

Synergizing Multiple Source Traffic Data for QC - UGA **June 2022 – September 2022**

- Collaborated on building an end-to-end data pipeline for cleaning & modeling data
- Worked on time-series modeling using various methods such as RNNs & TCNs for making traffic predictions
- Applied and tested various methods for dealing with erroneous data coming from various sensors

GDOT Lane Distribution Factor Project - UGA **March 2022 – July 2022**

- Collaborated on project to update the GDOT pavement design manual, utilizing insights from traffic data collected over a 5-year period
- Worked on cleansing the data as well as applying various modeling methods such as logistic regression & neural networks for predicting certain design factors

Mechanical Lead, AFDS Program – L3Harris **January 2021 – December 2021**

- In charge of all mechanical, thermal, & vibration design/analyses for prototype units for the Army
- Led mechanical cost reduction initiatives & performed preliminary and critical design reviews
- Collaborated with electrical, systems, & manufacturing engineering during all design phases to ensure producibility & manufacturability

WORK EXPERIENCE

Graduate Research Assistant **January 2022 – Present**
Smart Mobility & Infrastructure Lab, University of Georgia – Athens, GA

- Perform research related to mobility, traffic & transportation utilizing data provided by GDOT to improve their processes
- Read, evaluate & write research papers & reports outlining research methods and findings
- Collaborate with other graduate students in our lab on various projects

Associate Mechanical Engineer **October 2019 – January 2022**
L3Harris Technologies – Alpharetta, GA
Full Time Permanent Position

- Develop & design military aircraft display systems with a focus on electronics packaging & structural design
- Led the mechanical initiatives on the LAD back end as well as the AFDS program
- Utilize Solidworks drafting & modeling skills to produce/modify production ready drawings