# Jessica Rogado

Long Beach, CA | (760) 912 - 3603 | <u>jrogado23@yahoo.com</u> https://www.linkedin.com/in/j-rogado/ **SKILLS** 

Skills:

JavaScript, Node.js, Express, Sequelize, SQL, React, Redux, MATLAB, PostgreSQL, Git, GitHub, HTML5, CSS, SolidWorks, Ubuntu, Python, C++

#### **WORK EXPERIENCE**

Rivian Irvine, CA

Rotational (Trail) Engineer

Jul 2022 - Feb 2023

- Utilized AMSIMs software to provide accurate and comprehensive simulated range forecasts for current and future programs, supporting data-driven decision making and program level changes.
- Supported EPA certification testing and analysis, ensuring compliance with regulations and standards, and contributing to the successful launch of multiple car programs.

### **Multiphase and Complex Fluids Flow Lab**

Long Beach, CA

Undergraduate Research Assistant

Aug 2021 - Aug 2022

- Created a CAD model using SolidWorks that accurately represented the experimental setup, facilitating effective simulation and analysis of fluid behavior in zero-gravity conditions.
- Gathered and documented relevant variables, including comprehensive data on fluid characteristics like viscosity and density, and considered precise gravitational influences. These variables served as the foundation for simulations, closely mimicking real-world conditions and gravitational effects to ensure accuracy and reliability.

Rivian Irvine, CA

Range & Efficiency Engineering Intern

Jun 2021 - Aug 2021

Developed a sub vehicle model in MATLAB/Simulink to simulate road load forces and successfully
integrated it with an existing propulsion system. Conducted validation and analysis of the model's
simulated results against real-world coast-down test data.

#### PROJECT EXPERIENCE

#### **Fullstack Academy Senior Capstone**

Remote

FreBody

Jun 2023 - Jul 2023

• Designed and developed Free-Body, an engaging educational game utilizing Matter.js, to make physics accessible and enjoyable for a wide audience. The game includes interactive challenges, puzzles, and simulations that enable users to explore key physics concepts such as motion, forces, and energy.

## NASA L'Space - Proposal Writing and Evaluation

Remote

Deputy Project Investagator

Jun 2021 - Aug 2022

- Collaborated with an undergraduate team to develop and submit a successful research proposal focused on 3-D printed Graphene Aerogels, resulting in the acquisition of a prestigious NASA grant.
- Led efforts to explore the unique properties of Graphene Aerogels, including their lightweight nature, high surface area, and excellent conductivity, with the goal of identifying innovative applications in aerospace and materials science.

# NASA L'Space - Mission Concept Academy

Remote

Lead Engineer

Aug 2020 - Dec 2021

Long Beach, CA

Remote

• Successfully conducted a Preliminary Design Review (PDR) for a spacecraft mission targeting the Southern Hemisphere of Enceladus, encompassing in-depth evaluations of propulsion systems, optical systems, and material payload instrumentations.

## **EDUCATION**

California State University, Long Beach

B.S. Mechanical Engineering | B.A. Physics Graduation Date: Aug 2022

**Fullstack Academy - Grace Hopper Program** 

Graduation Date: Jul 2023

Certification of Completion