

# Isaac Legene

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## EDUCATION

<b>Georgia Institute of Technology</b>	Atlanta, GA
<i>M.S. in Robotics – Electrical and Computer Engineering</i>	2025 – 2027
<b>Missouri University of Science and Technology</b>	Rolla, MO
<i>B.S. in Engineering Management - Industrial Engineering (GPA: 3.51)</i>	2022 – 2024

## EXPERIENCE

<b>Georgia Tech LIDAR Lab</b>	Atlanta, GA
<i>Graduate Researcher</i>	<i>Aug 2025 – Present</i>
<ul style="list-style-type: none"><li>Trained and tuned reward based RL and distillation policies in Isaac Lab to improve humanoid locomotion.</li><li>Participated in hardware test for both locomotion and arm policies.</li><li>Developed sim-to-sim validation with the goal of implementing and testing on hardware.</li></ul>	
<b>Rivian</b>	Normal, IL
<i>Automation Controls Engineering Intern</i>	<i>Jan 2025 – Aug 2025</i>
<i>Robotics simulation and virtual commissioning R2</i>	
<ul style="list-style-type: none"><li>Supported simulation and virtual commissioning design reviews for all of R2 Body-in-White.</li><li>Developed full-scope production line simulations for upcoming R2 builds.</li><li>Assisted the development of a UI add-in tool that accelerated task timelines in simulation.</li><li>Tested Unity for virtual commissioning as a lower-cost replacement for traditional simulation and VC.</li></ul>	
<b>Tesla</b>	Fremont, CA
<i>Automation Controls Engineering Intern</i>	<i>Jan 2024 – Aug 2024</i>
<i>Body-in-White Production Equipment Integration for Models 3 &amp; Y</i>	
<ul style="list-style-type: none"><li>Oversaw and supported contract work and inventory for Body-in-White production equipment integration.</li><li>Supported the integration of new production controls and processes to ramp up production.</li><li>Designed and implemented HMIs throughout the body shop for future troubleshooting needs.</li><li>Implemented devices and developed PLC programs that were integrated into the production process.</li><li>Completed training in Fanuc/KUKA (101–301), AC/DC circuits, multimeter usage, pneumatics, and PLC programming.</li></ul>	
<b>Dakkota Integrated Systems</b>	Chicago, IL
<i>Automation Controls Engineering Intern</i>	<i>June 2023 – Aug 2023</i>
<i>Tier 1 supplier for the Ford Expedition and Lincoln Navigator</i>	
<ul style="list-style-type: none"><li>Assisted sustainability practices for all process automation systems to ensure quality and continuity of design.</li><li>Troubleshoot and maintain network performance, connectivity, and hardware to mitigate future failures.</li><li>Developed and updated standard work instructions for all manufacturing assembly lines and stations.</li></ul>	
<b>Roeslein &amp; Associates</b>	Saint Louis, MO
<i>Electrical &amp; Instrument Designer Intern</i>	<i>May 2022 – Aug 2022</i>
<i>Modular fabrication of biogas collection systems on farms domestically</i>	
<ul style="list-style-type: none"><li>Reviewed PLC programs for instrumentation and automated procurement processes for biogas systems.</li><li>Coordinated with vendors and managed purchase orders for upcoming projects to mitigate downtime.</li><li>Developed instrumentation datasheets used in P&amp;ID documents and inventory tracking.</li></ul>	

## TECHNICAL SKILLS

**Software:** Git, Process Simulate, Isaac Lab, ROS, Unity, Ignition, Linux, MuJoCo

**PLC and Robot Platforms:** Beckhoff, Allen-Bradley, Kuka, Fanuc, Kawasaki

**Languages:** C#/.NET, C++, Python, R

**Key Courses:** Computer Vision, Deep Reinforcement Learning, Human-AI Interactions, Robotics

## CLUBS AND ORGANIZATIONS

National Society of Black Engineers | Epsilon Mu Eta | Pi Kappa Alpha