**RAQUEL SUSKO** (408) 609-4282 | raquel1210@icloud.com | linkedin.com/in/raquel-susko-aa6831289

## Objective

Electrical Engineering student with minors in Biomedical Engineering and Computer Science, seeking research or internship opportunities focused on interdisciplinary innovation in technology, robotics, or biomedical devices.

## Education

**Texas A&M University – College Station, TX** *Expected Graduation: May 2027*
**B.S. in Electrical Engineering** | *GPA: 4.0* University and Departmental Honors Student
Minors: Biomedical Engineering, Computer Science

## Experience

**Texas A&M University – Reinforcement Learning Research**
*Student Researcher | Jan 2025 – Present*

- Developing adaptive RL algorithms using human expert demonstrations for robotic navigation.
- Leveraging transformers and model-based RL to improve decision-making and sample efficiency.

**Texas A&M University – Electrochemical Protein Detection Research**
*Student Researcher | Jan 2025 – Present*

- Analyzed electrochemical biosensor data to detect BNP and NT-proBNP biomarkers for cardiovascular health monitoring.
- Designed a PCB integrating signal amplifiers for dual protein detection systems.

**WIRED AUV Robotics Club – Texas A&M University**
*Electrical Sub-Team Lead & Programming Team Member | Aug 2023 – Present*

- Designed and built autonomous underwater vehicles with integrated VectorNav, DVL, pinger, pressure sensors, Jetson Nano, and custom PCBs.
- Created image recognition pipelines using RoboFlow and developed power distribution boards with Altium.

**Texas A&M University – Computer Science Department**
*Peer Teacher | Jan 2025 – Present*

- Facilitated lab sessions and mentored students in C++ and data structures.
- Provided personalized support to improve understanding of core programming concepts.

## Projects

**CNN Image Classifier – Aggies Coding Club**
*Team Member | Sept 2023 – Dec 2023*

- Designed and trained convolutional neural networks for image classification tasks using TensorFlow.
- Conducted comparative analysis of different layer configurations and activation functions.

**Seamless Neural Artificial Intelligence Capture**
*Personal Project | Sept 2024 - Dec 2024*

- Built a device using a Raspberry Pi that detects objects in images and identifies their price using web scraping and a custom ML pipeline.
- Developed a GUI for user interaction and visualization.

**Aggies Invent – Thermoelectric Wristband**
*Team Competitor | April 5–7, 2024 (3rd Place)*

- Designed a wearable cooling device to assist Paralympic athletes with heat regulation.
- Conducted user research and prototyping in a cross-functional engineering team.

## Technical Skills

**Languages:** Python, C++, Java, Verilog, R
**Frameworks/Tools:** TensorFlow, ROS, GitHub, MATLAB, SolidWorks, Altium Designer
**Libraries:** NumPy, Pandas, Matplotlib
**Other:** GUI Development, Web Scraping, Excel