PARAM BUTANI - 917.574.4885 / param.butani@gmail.com

San Luis Obispo, CA

EDUCATION:

CAL POLY SLO - MAJORING IN ELECTRICAL ENGINEERING - pvbutani@calpoly.edu

AGOURA HIGH SCHOOL - GRADUATED CLASS OF 2025, HONORS SOCIETY STUDENT | 4.2 GPA

SKILLS

Amateur Radio Technician License | MIG/TIG Welding | CAN Bus | Circuit Schematic Design | Arduino and ESP32 | Java Script | C and C++ | Python | CAD | Altium PCB Design | Oscilloscope | Power Supplies | Function Generator | LT Spice | CNC Milling | CAM | PCB Design | High Voltage Architecture | High Frequency transceivers | BLDC Motor Control

PROJECT EXPERIENCE

PRESIDENT & PROJECT LEAD| FUTURE FUELS — SEPTEMBER 2025 – PRESENT

PROJECT LEAD | DEEP SEA ELECTRIC FISHING BOAT — APRIL 2026 – PRESENT

- Lead a **20-person engineering** team in partnership with 500 Sails to develop a deep-sea electric boat for food gathering during high-typhoon seasons; funded through government grant
- Developed a resilient food access solution to help local fishermen continue harvesting during high-typhoon seasons and continue fishing when they are cut off from outside resources
- Developed a dual-battery power architecture and waterproof electrical system for an 18-ft sailboat.
- **CAD**, **ESP32** control, motor-driver, CAN bus, and **high-frequency transceiver** integration.
- Address supply chain and manufacturing constraints during electrical-component selection.

PROJECT LEAD | Mobile Solar Panel — SEPTEMBER 2025 – APRIL 2026

- Led electrical design and integration for a **$20K mobile solar power system**.
- Created **circuit schematics**, **electrical BOMs**, and component specifications.
- Coordinated electrical design with **CAD-based mechanical integration** across sub teams.

Power Systems Team Lead | Naval Innovations — SEPTEMBER 2025 – PRESENT

- Designed a 150-cell lithium-ion battery pack for a **7.6 kW autonomous submarine** platform.
- Defined electrical architecture for operation at depths up to 1,000 ft.
- Designed a **MOSFET-based 600 Amp pulse-discharge circuit** for custom battery spot welding.
- Performed **battery-pack configuration analysis**, BMS integration, and **failure-mode analysis** to reduce voltage-sag and thermal-runaway risk.

WORK EXPERIENCE

CAL POLY MACHINE SHOP TECH — AUGUST 2026 – PRESENT

- Performed **maintenance** trouble shooting in wood and metal shops
- Experience using **manual Mills, Lathes, TIG/Mig Welding** and other common shop tools
- Designed and manufactured custom **CNC Mill, CNC Waterjet,** and **CNC Wood Router** parts

UKRAINE ARMY 25TH AIRBORNE BRIGADE — JUNE 2026 – JULY 2026

- Worked remotely to aid in **PCB design** for improvement of battery technology in **frontline deployment**