

EXPERIENCES

BIOENGINEERING INTERN, Stanford Institutes of Medicinal Research — Jun – Aug 2025 Stanford University

- Selected as 1/20 interns from 1,800+ applicants to design a biomedical device using the BioDesign process, translating unmet clinical needs into clear product requirements.
- Designed single-channel portable fNIRS (functional near-infrared spectroscopy) device with custom PCB (78.88mm x 43.26mm) integrating 2 photodiodes and 2 infrared LEDs (740/850nm) on flexible board to measure oxyhemoglobin and deoxyhemoglobin changes, addressing the subjectivity and latency of traditional mental-health surveys.
- Faced challenges meeting 100g weight and \$50 cost constraints, repeatedly optimized component placement.
- Learned iterative prototyping: soldered circuits, conducted stress drop testing and clinical wear trials for ergonomic fit.

FOUNDER & PRODUCT LEAD, Neuropod Technologies — Aug 2024 – Jun 2025 Cupertino, California

- Invented portable behind-the-ear EEG device integrating custom PCB with gain/amplification stages, filtering circuits, and ESP32 Bluetooth module for wireless transmission. Achieved \$65 build cost and signal acquisition with minimal noise interference.
- Designed multi-stage hardware prototypes: iterated from Arduino microcontroller with op-amp/aluminum foil electrodes (V1) to analog-digital oscilloscope setup (V2) to final PCB with reinforcement learning-based adaptive filtering. 3D-printed TPU enclosure, selected electrodes and resistors for signal quality, optimized component layout for compact form factor.
- Validated hardware through clinical wear, drop testing, water ingress IP54 resistance; 30-minute pre-seizure prediction with 5ms BLE latency. Comparable signal quality to clinical EEG systems at 2-4x lower cost, eliminating bulky 64-electrode setups.

PROJECT INTERN, Solo Technologies — Sep 2024 – Mar 2025 Palo Alto, California

- Built an on-device iOS flagship product under performance constraints including model size, inference time, and latency for cloud-free AI; Presented at CES 2026, earned \$6k stipend.

COFOUNDER & CTO, Share-On — March 2024 – Present Cupertino, California

- Created and launched a teen mental health platform, leading product definition, system architecture, and iOS implementation.
- Scaled to 7,000+ users in three months, participated in ElevX! Cohort 13 incubator, recognition from City of Cupertino Mayor.

INDEPENDENT RESEARCH, Peter Tass Lab — Jun 2023 – Present Stanford University

- Published a comparative analysis on EEG-based seizure detection and prediction, evaluating supervised learning approaches for forecasting performance.
- Collaborating with a Stanford postdoctoral researcher using The Virtual Brain (TVB) neural mass model to study stimulation strategies for seizure suppression, only high school presenter at IEEE Body Sensor Networks.

EDUCATION

Fall 2026 ● **Stanford University**

Intended Focus: Biomechanical Engineering, Computer Science, Symbolic Systems

Jan '23 – Nov '25 ● **Cupertino High School**

Unweighted GPA: 4.00; Advanced Courses in Physics, Biology, Calculus, 16 APs

SELECT AWARDS

- Pete Conrad Scholar, Intl 2025 Conrad Challenge Power Pitch Award
- Bryan Cameron Impact Scholar Finalist (2.5% acceptance),
- Coca-Cola Scholar Semifinalist (1.2% AR)
- Accepted research to IEEE Neural Engineering, IEEE Body Sensor Networks,
- Won 'Best Poster' @ IEEE MIT Undergraduate Research Technology Conference
- 1st Place School Photographers of America Student Competition; won \$2k Sony Camera
- State Winner @ Samsung Solve for Tomorrow won \$12k in Samsung tech for my school
- 2nd Place, California Science and Engineering Fair – Computational Systems: Medical
- 1st Place, Synopsys Science & Engineering Fair – Biomedical Engineering