

# RYAN SOHAE BOHLULI

(214) 797-9019 | <https://www.linkedin.com/in/bohluli/> | [ryan@neurosafetysystems.com](mailto:ryan@neurosafetysystems.com)

## EDUCATION

### JOHNS HOPKINS UNIVERSITY

Bachelor of Science in Computational Neuroscience (Cumulative GPA: 3.92)

Baltimore, MD  
Expected May 2027

## STARTUP EXPERIENCE

### NEURO SAFETY SYSTEMS INC.

Co-founder, Chief Operating Officer, and Data Science Lead

Baltimore, MD  
May 2025 - Present

- Co-founded a neurotechnology venture building an EEG-powered fatigue detection platform for the logistics industry; valued at \$2.5M pre-seed via SAFE.
- Architected real-time ML pipelines to classify driver vigilance states using in-ear EEG, producing a proprietary Vigilance Score that outperforms camera-based fatigue classification by 40%.
- Secured pilot agreements with Terminal Transportation and Old Dominion Freight Line; established a research partnership with the U.S. Army Aeromedical Research Laboratory (USAARL).
- Partnered with IDUN Technologies for consumer-grade hardware; filed a provisional patent for proprietary signal processing technology.
- Designed IRB-approved human fatigue trials at JHU Bayview to validate the real-time classification model on consumer-grade in-ear electrodes.
- Selected for Antler NYC and JHU Spark/Ignite accelerators; finalist for eFEST, LeapYear, and Telora funds; conducted 50+ ICP interviews.

## RESEARCH EXPERIENCE

### THAKOR LABORATORY, Johns Hopkins School of Medicine

Undergraduate Research Assistant (PURA Fellow)

Baltimore, MD  
Aug 2024 – Present

- Engineered closed-loop epidural stimulation systems to modulate blood pressure in post-spinal cord injury rats using multi-modal physiological signals.
- Validated non-invasive Vagus Nerve Stimulation against surgical benchmarks; authored an approved IACUC amendment to launch Autonomic Dysreflexia research.
- Performed 30+ rat laminectomies, assisted in 10+ porcine surgeries, and designed custom surgical tools via SOLIDWORKS.

### CHO LABORATORY, Johns Hopkins School of Medicine

Undergraduate Research Assistant

Baltimore, MD  
Feb 2026 – Present

- Developing a clinical platform to characterize pain signals through in-ear EEG; building trial-ready software integrating Arduino-based pulse synchronization.

## CLINICAL EXPERIENCE

### ARBUTUS VOLUNTEER FIRE DEPARTMENT

Volunteer EMT

Baltimore, MD  
Nov 2025 – Present

- Completing station-based training for ambulance certification, including HAZMAT
- Training as a 3rd rider alongside experienced operators.

### THEODORE/LUBELSKI LABORATORY, Johns Hopkins School of Medicine

Undergraduate Clinical Research Assistant

Baltimore, MD  
Feb 2026 – Present

- Collecting EEG data on spine surgery patients to identify biomarkers of postoperative delirium; consenting patients and administering cognitive assessments.

## PUBLICATIONS

- 8 publications across Nature Biomedical Engineering (accepted), Nature Scientific Reports, ASME, and bioRxiv; 3 first-author.
- Full list available upon request.

## LEADERSHIP

### IRANIAN CULTURAL SOCIETY, Johns Hopkins University

President and Co-founder

Baltimore, MD  
Dec 2024 – Present

- Reactivated the org, partnered with 7 regional cultural organizations, and organized events drawing 300+ total attendees.

### JOHNS HOPKINS RUGBY FOOTBALL CLUB, Johns Hopkins University

Social Chair, Executive Board

Baltimore, MD  
Sep 2024 - Present

## SKILLS AND CERTIFICATIONS

**Technical:** Python, Java, MATLAB/Simulink, C#, HTML, Unix Bash, OpenAI API, n8n, SOLIDWORKS, Blender, Arduino.

**Clinical:** EMT-Basic (TX: 791604), HAZMAT, CPR/BLS, IACUC Animal Care & Use, Canon Aplio Ultrasound.

**Languages:** English (Native), Farsi (Native), French (Conversational).