Joshua Levitt, PhD

Neuroengineer

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Biomedical engineer specializing in neurofeedback, machine learning, and real-time signal processing. Experienced in multimodal data collection and passionate about translating neuroscience insights into new neurotech products

EDUCATION

Visiting Student, Massachusetts Institute of Technology **2023-25**

Ph.D., Biomedical Engineering, Boston University **2019-25**

Laura Lewis laboratory for Imaging Brain Dynamics

- Conducted novel EEG-fMRI sleep neurofeedback experiments
- Trained + deployed a Recurrent Neural Network for EEG phase prediction
- Built EEG-LLAMAS, an open-source MATLAB based EEG neurofeedback platform
- Authored and contributed to scholarly literature and conferences
- 2 x Assistant teacher for Intro to Programming for Engineers at BU

Sc. M., Biomedical Engineering, Brown University **2015-17**

Carl Saab laboratory at Center for Pain and Neural Circuits

- Collected and analyzed EEG from human subjects in acute & chronic pain
- Trained support vector machine for pain phenotype classification

B.S, Biology, Bates College, Lewiston, ME **2009-13**

PROFESSIONAL EXPERIENCE

Clinical Research Program Coordinator, Lifespan Corporation, Providence, RI **2017-19**

Carl Saab laboratory at the Center for Pain and Neural Circuits

- Collected EEG and accelerometer data from chronic pain patients
- Built an SVM to detect patients with chronic radiculopathy

Research Associate, Montefiore Medical Center, Bronx, NY **2013-15**

Department of Obstetrics, Gynecology, and Women's Health

LEADERSHIP AND VOLUNTEERING

Research + Impact Lead, Nucleate - Boston Chapter **2023-24**

- Collected data to map the Boston area biomedical engineering ecosystem
- Helped recruit activator participants and plan training events

2024 Neurophotonics Symposium Co-chair **2023**

2022 Quantitative Biology and Physiology Symposium Co-Chair **2022**

- Planned events and recruited presenters and keynote speakers

4x Graduate student mentor – Boston University **2020-24**

- Helped new graduate students navigate their first year at BU

HONORS, AWARDS and ACCOMPLISHMENTS

Distinguished Biomedical Engineering Fellowship, Boston University **2019-20**

Quantitative Biology and Physiology trainee, Boston University **2019-25**

NSF research trainee: Understanding the Brain: Neurophotonics; Boston University **2020-25**

Society for Neuroscience Trainee Professional Development Award recipient **2021**

Authored and Co-authored 10 peer-reviewed neuroscience publications **2014-Present**

SKILLS – EEG + fMRI collection | real-time signal processing | machine learning | MATLAB | Python