Lucky Jain

ljain2@jh.edu
(408) 461-1414

Applying computation to predictive modeling, brain-computer interfaces, and user-facing software with real-word impact.

Experiences

ML Researcher | *Laboratory of Computational Intensive Care Medicine* Nov 2024 – Present
- Effected time-series feature extraction of ICU stay characteristics from Mayo Clinic data for external validation of machine learning model that predicts delirium in ICU patients

Decoding Lead | *Brain-Computer Interface Society* Sep 2024 – Present
- Conducting EEG experiment to determine the effect of reward vs. punishment
- Designed experiment for motor imagery data collection and helped craft machine learning decoding algorithm for presentation at IEEE Conference

Web Developer & Research Assistant | *COACH* Feb 2025 – Present
- Spearheading development of FLARe app and portal for fear-based learning research
- Implemented cloud deployment and database management for public access of tool

Full-Stack Developer | *Semester.ly* Feb 2025 – Present
- Developing AI-enabled chatbot widget to dynamically recommend courses based on major requirements, past user data, and scheduling

Project Lead | *Baltimore Foodline* Sep 2024 – Present
- Leading full-stack development for an Ignite-Fund backed web app to send subscribers nearby food pantry information and real-time updates from registered pantries
- Working with Python, Javascript/Typescript, HTML/CSS/Tailwind, Node.js, Next.js, React, Vercel, and Firebase

Seizure Detection | *Volunteers for Medical Engineering* Sep 2024 – Present
- Developing a machine learning algorithm for febrile seizure detection and prediction using heart rate, temperature, and accelerometer metrics

Full-Stack Internship | *Aireful* Jan 2025 – April 2025
- Worked with PostgreSQL to store and query data from an AI chatbot application
- Created front-end/back-end flow to generate custom pdf documents

Outreach Lead | *FIRST Robotics Team 846* Jul 2022 – Aug 2024
- Recognized as Dean's List Semi-Finalist for leadership and technical achievement
- Founded a task force for women in robotics, inspired 50+ girls through demos
- Led a 21-week after-school robotics program mentoring 60+ middle schoolers
- Launched Arduino workshops for 30+ underprivileged students

President | *Health Education At Lynbrook* Nov 2020 – May 2024
- Implemented work planner to inspire 20+ writers and spearhead timeline of magazine
- Crafted and presented engaging healthcare content and weekly activities

Treasurer & Designer | *FIRST Robotics Team 846* Nov 2020 – Jan 2024
- Initiated grants workgroup and coached members; awarded $25,000 YTD
- Led Wrist Subsystem integration, build, and redesign using physics and CAD/CAM
- Awarded for Team Sustainability, Quality, Entrepreneurship, Finalists (international), Innovation in Control, Engineering Inspiration, Regional Winners, Excellence in Engineering

Education

Computer Science & Neuroscience
Johns Hopkins University
August 2024 – May 2027
Dean's List

Relevant Courses

Machine Learning *(Coursera)*
Supervised/unsupervised learning, deep learning basics

Data Science & Machine Learning *(Coastline College)*
Data preprocessing, model selection, training, & evaluation

Data Structures *(JHU)*
Algorithm efficiency, problem-solving

Neuroscience: Cognitive *(JHU)*
Mechanisms behind memory, perception, and learning

Personal Projects

Executive Coach App
Integrated Gemini API with react-native to build iOS app for continuous and live feedback on speech structure, delivery, and impact

Text Message Analytics
Parsed text messages for conversation quality and statistics; applied k-means clustering and sentiment analysis for closeness ranking

3D Printing Saxophone Reeds
Experimented with print settings, filaments, and CAD design to 3D print saxophone reeds with ideal playability.