Alexis Pomares

Neuroengineer | Deep Learning and BCIs

alexis@synapses.bio · synapses.bio

WORK EXPERIENCE

Imperial College London
2020 – 2022

Computational Neuroscientist

Created deep learning model to classify EEG responses to electrical brain stimulation, advancing my lab's SOTA from <50% accuracy (Matlab) to 92% (Python), surpassing human-level (~65%). Collected in-vivo experimental data.

Lymbic · lymbic.ai
2022 - 2023

Technical Founder (Brain-Computer Interfaces)

Founded neurotech startup to build "neuro-apps" around a product best described as a "Fitbit for your brain". Custom deep-learning pipeline achieved near-perfect user recognition via consumer EEG like Muse or Emotiv.

Beyond · beyond.tech
2023 - 2025

Technical Founder (Software Development)

Led engineering and product development, building a B2B blockchain infrastructure provider. Got successfully acquired in early 2025 by a $16.5B cross-blockchain interoperability company.

EDUCATION

Imperial College London
2020 - 2021

Master of Research (MRes) in Neurotechnology

Specialized in advanced neuroimaging (fMRI, EEG, MEG), neurostimulation (TES, TMS), computational neuroscience, neural signal processing, deep learning, brain-machine interfaces (BMIs), and real-time neural decoding.

Univ. Carlos III Madrid
2015 - 2018

Biomedical Engineering

Specialized in medical image processing, surgical phantom design and physical creation (3D bio-printing), and real-time image-guided surgery.

COMP. NEURO

Neuroimaging (EEG, fMRI)

Neurostimulation (TES, TMS)

Brain Data Collection (in-vivo)

DEEP LEARNING

Python, JAX & TensorFlow

Neural Signal Processing

Statistical Models & Analysis

SOFTWARE ENG.

MuJoCo & Gymnasium API

Product Dev. & Leadership

Rapid Prototyping