

Alex Estrada Berlanga, Ph.D. Candidate

✉ aestra@seas.upenn.edu

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🌐 <https://alejandroaestrada.com/>



Employment History

- 2023 – **Research Associate**, UC San Diego, Halicioğlu Data Science Institute.
Project: GraFT (Graph-Filtered Temporal Dictionary Learning)
- 2022 – **Software Engineer**, NEquest.
AI-based teleneurology platform. Face and voice analysis lead.
- 2022 – 2023 **MATLAB Community Toolbox Software Developer**, MathWorks, Neuroscience.
Toolboxes: EEGLAB-ml, Neurodata Without Borders (NWB), Brain Imaging Data Structure (BIDS).
- Research Associate**, University of California, Davis, Department of Neurology.
iEEG Studies of Cognition in Epilepsy Patients.
Systems: Natus, Neuralynx, BCI2000.
- 2020 – 2022 **MATLAB Student Ambassador**, MathWorks, University of California, Davis.

Education

- 2023 – 2028 expected **Ph.D., University of Pennsylvania**, Bioengineering.
Neuroengineering: *Motor decoding, programming and control*
Bijan Pesaran Lab
- 2018 – 2022 **B.S. Biomedical Engineering, Computer Science Minor**,
University of California, Davis.
Engineering GPA: 3.76

Research Publications

Journal Articles

- 1 Y. Sun *et al.*, “Electric field-guided collective motility initiation of large epidermal cell groups,” *Molecular Biology of the Cell*, vol. 34, no. 5, 2023. [DOI: 10.1091/mbc.e22-09-0391](https://doi.org/10.1091/mbc.e22-09-0391).

Skills



- Languages **Strong reading, writing and speaking competencies for English, Spanish.**
- Coding **Python, MATLAB, \LaTeX**
- Databases + Packages **OpenNeuro, iEEG, AWS. Pytorch, Pandas, Matplotlib, Numpy ...**
- Web Dev **HTML, CSS, JavaScript**
- Misc. **Academic research, seminars, time series analysis.**

Miscellaneous Experience



Awards and Achievements

- 2023 **GEM Associate Fellow**, University of Pennsylvania.
- Hispanic Scholar Designation**, Hispanic Scholarship Fund.

Miscellaneous Experience (continued)

- 2022  **Outstanding Senior Design Award**, Department of Biomedical Engineering, College of Engineering, UC Davis.
- 2021  **Prosthetic Design Showcase**, AdTech Club @ UC Davis, CAD Design.

Memberships

- 2021 – 2022  **NeuroVA**. Senior Design, Full Stack Developer.
- 2020 – 2022  **Biomedical Engineering Society**. Member.

References

Available on Request