

Alexander Fung

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Pre-doctoral researcher interested in computational principles of neural memory.

EDUCATION

2019 – 2023	B.S. in Electrical Engineering & Computer Science B.A. in Molecular & Cellular Biology GPA: 3.99	UNIVERSITY OF CALIFORNIA, BERKELEY
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PROFESSIONAL EXPERIENCE

2023 – present	Research Assistant <i>Fedorenko Lab — McGovern Institute for Brain Research</i> <ul style="list-style-type: none">Computational and neuroimaging approaches investigating the neural basis of language.	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
2022 – 2023	Undergraduate Researcher <i>Bouchard Lab — Lawrence Berkeley National Laboratory</i> <ul style="list-style-type: none">Learning stimulus-evoked response properties in rat auditory cortex.	BERKELEY LAB
2021 – 2023	Undergraduate Researcher <i>Song Lab — Department of Electrical Engineering & Computer Science</i> <ul style="list-style-type: none">Characterization of protein folding patterns, unsupervised protein structure prediction.	UNIVERSITY OF CALIFORNIA, BERKELEY

HONORS & AWARDS

2023	NSF Graduate Research Fellowship* *Declined.	NATIONAL SCIENCE FOUNDATION
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PUBLICATIONS

Papers

- Fung, A.***, Koehl, A.*, Jagota, M., Song, Y. (2022). The Impact of Protein Dynamics on Residue-Residue Co-evolution and Contact Prediction. Preprint.
- Dudukovich, R., Gormley, D., Kancharla, S., Wagner, K., Short, R., Brooks, D., Fantl, J., Janardhanan, S., **Fung, A.** (2022). Towards the Development of a Multi-Agent Cognitive Networking System for the Lunar Environment. *IEEE Journal of Radio Frequency Identification*.
- Koehl, A.*, Jagota, M.*, Erdmann-Pham, D.*, **Fung, A.**, Song, Y. (2021). Transferability of Geometric Patterns from Protein Self-Interactions to Protein-Ligand Interactions. *Pacific Symposium on Biocomputing*.

Posters

- Fung, A.***, Zhuang, C.*, Piantadosi, S., Andreas, J., Fedorenko, E. (2024). Word-Order Error Detection Helps Data-Efficient Language Models Learn Syntax [Poster Presentation]. *Cognitive Computational Neuroscience 2024*.
- Kean, H., **Fung, A.**, Rule, J., Tenenbaum, J., Piantadosi, S., Fedorenko, E. (2024). Deductive and Inductive Processing Dissociate in the Human Brain [Poster Presentation]. *Cognitive Computational Neuroscience 2024*.

*Equal contribution.