

Sabera Talukder

Education

California Institute of Technology

Ph.D. in [Machine Learning](#) with Georgia Gkioxari & Yisong Yue

2019-Present

Pasadena, CA

Stanford University

B.S. in [Electrical Engineering](#) with Honors

2014-2018

B.S. in [Biochemistry](#) with Honors

Stanford, CA

Honors

National Science Foundation Graduate Research Fellow

2020-2023

Tianqiao and Chrissy Chen Fellow

2019

National Broadcasts and Presentations

2012-Present

Guest on NPR Science Friday with Ira Flatow, PBS Newshour Special, California Academy of Sciences

Google Science Fair & Scientific American Science-In-Action Finalist

2012

1 of 5 international finalists

Select Publications (* Denotes Equal Contribution)

Generalizability Under Sensor Failure: Tokenization + Transformers Enable...

COSYNE 2024

Geeling Chau*, Yujin An*, Ahamed Raffey Iqbal*, Soon-Jo Chung, Yisong Yue, [Sabera Talukder](#)

TOTEM: Tokenized Time Series Embeddings for General Time Series Analysis

ICML 2024 Submission

[Sabera Talukder](#), Yisong Yue, Georgia Gkioxari

<https://arxiv.org/pdf/2402.16412.pdf>

Deep Neural Imputation: A Framework for Recovering Incomplete...

COSYNE 2023; Workshop, Neurips 2022

[Sabera Talukder](#)*, Jennifer Sun*, Matthew Leonard, Bingni Brunton, Yisong Yue

<https://arxiv.org/pdf/2206.08094.pdf>

Architecture Agnostic Neural Networks

Workshop Oral, Neurips 2020

[Sabera Talukder](#)*, Guruprasad Raghavan*, Yisong Yue

<https://arxiv.org/pdf/2011.02712.pdf>

On the Benefits of Early Fusion in Multimodal Representation Learning

Workshop, Neurips 2020

George Barnum*, [Sabera Talukder](#)*, Yisong Yue

<https://arxiv.org/pdf/2011.07191.pdf>

A Portable Electrostatic Precipitator to Reduce Respiratory Death in...

Oral, IEEE Compel 2017

[Sabera Talukder](#), Sanghyeon Park, Juan Rivas-Davila

<https://ieeexplore.ieee.org/abstract/document/8013316>

Work Experience

Chan Zuckerberg Biohub

2018-2019

Software Engineer

San Francisco, CA

Founded the inaugural Neuroengineering Symposium & created interdisciplinary ML+Neuro projects at Stanford, Berkeley & UCSF.

Select Invited Talks

Computer Vision at Caltech - Vision & Imaging Group

December 2023

Center for Data Driven Discovery - CD3 Seminar

November 2023

Jet Propulsion Laboratory - Data Science Working Group

October 2023

Computation Systems Neuroscience Conference

March 2023

Select Academic Activities

Lecturer & Teaching Assistant - Management of Technology

2023 -Present

Teaching with Richard Murray, Stu Feldman, Eric Schmidt

https://murray.cds.caltech.edu/E/SEC_103, Winter 2024

Organizing Committee Member - COSYNE

2023-Present

Social Media Chair

<https://www.cosyne.org/>

Founder - Taming Complexity Workshop

2023

United researchers analyzing complex high dimensional neuroscience data via quantitative measures & latent space analysis. [website](#)

Founder - Chen Data Science & Artificial Intelligence Summer School

2022

Created ChenDataSAI alongside Caltech Professors: Pietro Perona, Lior Pachter, David Anderson, and Yisong Yue. I lectured for 1/3rd of the course, spearheaded open course content creation (~1000 views on one of my lectures), selected the external professors and guided them in their lecture creation. The [agenda](#), the [course code and solutions](#), and the [lecture recordings](#).