



# Srijita Karmakar

*Dept. of Psychological and Brain Sciences, UC Santa Barbara*

I am currently a PhD student in the **Vision and Image Understanding Lab**, working under the supervision of **Prof. Miguel Eckstein**, at the Dept. of Psychological and Brain Sciences, UCSB.

## Education

- 2022-present **Graduate Student, Dept. of Psychological and Brain Sciences, University of California, Santa Barbara.**
- 2017-2022 **5 year Integrated BS-MS Dual Degree Program (Major: Biological Sciences), Indian Institute of Science Education and Research (IISER), Kolkata.**  
**CGPA: 9.46** (out of 10)
- 2017 **Higher Secondary Education Examination, Delhi Public School, Kolkata.**  
AISSE percentage: 93.5%
- 2015 **Secondary Education Examination, Auxilium Convent School, Kolkata.**  
ICSE percentage: 95.6%

## Research Experience

### Conference Abstract: Vision Sciences Society 2022

May 2022 **Original Research Abstract.**

**Karmakar, S.,** and Das, K. Does visual experience with face masks aid face recognition during the COVID-19 pandemic? *Journal of Vision* 22:14 3243 (2022) doi: <https://doi.org/10.1167/jov.22.14.3243>

### Publications

April 2021 **Original Research Article.**

Dasgupta, D. *et al.* Altered Food Habits? Understanding the Feeding Preference of Free-Ranging Gray Langurs Within an Urban Settlement. *Front. Psychol.* 12:1120 (2021) doi: <https://doi.org/10.3389/fpsyg.2021.649027>

Contribution: Extensive field work based data collection, data analysis

### Projects and Internships

Aug 2021 - **Master's Research Project, IISER Kolkata, Dr. Koel Das, DMS, IISER Kolkata.**

present Master's thesis work on the neural underpinnings of face perception in humans, by utilizing statistical pattern recognition and machine learning

Aug-Dec **Semester Reading Project, IISER Kolkata, Dr. Koel Das, DMS, IISER Kolkata.**

2020 Reading Project on Machine Learning and its applications in the analysis of EEG data. Learned about Bayesian Decision Theory and techniques for feature extraction such as LDA and PCA, and model evaluation using cross validation and bootstrapping to train and test classifiers

### *Contact Information*

+1 820-758-2566 • [srijita@ucsb.edu](mailto:srijita@ucsb.edu)

Page 1 of 3

- May-July 2019 **Summer Internship, University of Calcutta, Dr. Manabi Paul, Dept. of Env. Sc., Science College, Kolkata.**  
Interned in the field of Animal Behaviour to study primate-human interaction and unique feeding behaviour displayed by a group of urban-adapted primates (Gray Langurs). The work consisted of building an ethogram based on ad-libitum study, subsequent field work and learning to analyze behaviour through data
- May-July 2018 **Summer Internship, IISER Kolkata, Dr. Mohit Prasad, DBS, IISER Kolkata.**  
Interned in the field of *Drosophila* genetics to study the effect of Homoeopathy medicines, such as Arsenicum and Gelsemium, on fruit fly development with focus on eye development in a mutant strain, and also learned techniques to dissect, stain and image *Drosophila* ovary

## Teaching Experience

- Fall 2022 **Graduate Teaching Assistant, Perception and Vision, Prof. Miguel Eckstein.**  
Duties: TA to 100-odd undergraduates, office hours, and grading
- Spring 2022 **Teaching Assistantship, Evolutionary Biology, Dr. Anindita Bhadra, IISER Kolkata.**  
Duties: Proctoring, grading, and discussions
- Fall 2021 **Teaching Assistantship, Cell Biology, Dr. Bidisha Sinha, IISER Kolkata.**  
Duties: Proctoring, and discussions

## Achievements

- 2022 **Qualified UGC-NET (June 2021) Junior Research Fellow (JRF).**  
Percentile: 99.44, Rank: 100
- 2022 **Vision Sciences Society 2022 Travel Award Recipient.**
- 2017 **DST-INSPIRE Scholarship (JBNSTS Senior Scholar).**  
Awarded the prestigious DST-INSPIRE (Department of Science and Technology-Innovation in Science Pursuit for Inspired Research, Govt. of India) Scholarship (JBNSTS Senior Scholarship: ranked among **top 10 scholars**)
- 2015 **Jagadish Bose National Talent Search Junior Scholar.**  
Awarded the JBNSTS Junior Scholarship, Govt. of West Bengal

## Conferences and Workshops

- May, 2022 **Vision Sciences Society Annual Meet.**  
Presented a poster on my Masters' research project
- March, 2021 **Brain Awareness Week, IIT Gandhinagar.**  
Selected for and attended a series of online talks, workshops and panel discussions organized as part of the Brain Awareness Week, hosted over a week by the Centre for Cognitive and Brain Sciences, IITGN
- January, 2021 **7th Annual Conference of Cognitive Science.**  
Attended a series of online talks and panel discussions organized and hosted over 3 days by the Association for Cognitive Science (ACS)
- November, 2020 **MathWorks Webinar Series.**  
Attended webinars on the topics of Data Science, Machine Learning and introductory Deep Learning with emphasis on the application of MATLAB programming language
- January, 2019 **Understanding Behaviour.**  
Attended the Understanding Behaviour conference in person, organized hosted over 3 days by IISER Kolkata, on behavioural research across disciplines and methods of study

## Contact Information

December, **Vijyoshi (DST-INSPIRE) National Science Camp.**

2017 Attended the annually-held three-day national science camp organized by Dept. of Science and Technology, Govt. of India

## Technical Skills

Languages **Python, MATLAB (including Psychtoolbox and EEGLAB), R**

Softwares **Photoshop, Origin, ImageJ, L<sup>A</sup>T<sub>E</sub>X**

Techniques **EEG data analysis, Pattern Recognition, Machine Learning**

## Standardized Test Scores

July, 2021 **General GRE.**

Analytical Writing: 5.0, Verbal Reasoning: 163, Quantitative Reasoning: 165

July, 2021 **TOEFL-iBT.**

118 (Reading: 30, Listening: 30, Speaking: 28, Writing: 30)

## Language Skills

**Native Bengali and Hindi, Fluent English, Elementary Spanish.**

## Extra-curricular Activities and Skills

Teaching Have been actively involved in teaching as a part of the student-led initiative of my alma mater IISER Kolkata, namely *Ek Pehal* (An Initiative), to teach Science, Math and English to young children from local under-privileged families for over 2 years

Extra-curricular

- o Achieved first position in a Sci-poetry competition organized as a collaboration between the IISER-K Literary and Science Clubs, 2021
- o Selected for and completed a trek to Brahmatal Summit (>12000 feet) in Uttarakhand, India (organized by IISER Kolkata, 2020)
- o Orange belt holder in martial arts (Shotokan Karate, 2018)
- o Passionate about literature, writing, running, cycling, films and music, and I turn to my guitar, ukulele, books and poetry to rejuvenate my mind

Strengths Perseverance, diligence, drive, critical thinking, team-work, scientific writing, time-management, interdisciplinary research

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