SHWETA PRASAD

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Education:

-Ashoka University - Sonepat , Haryana. Batch : UG 2018-2021

- Pursuing a B.Sc (Hons) in Computer Science (Major) and a Minor in Biology,
- Current major GPA 3.4/4, CGPA 3.6/4

-Neuromatch Academy - Summer school in Computational Neuroscience: 2020

-Hari Sri Vidya Nidhi School - Thrissur, Kerala : 2012 - 2016

- Class XII I.S.C 94.25%; Subjects: Mathematics, Physics, Chemistry, Biology, English (Literature & Language)
- Class X I.C.S.E 94.25%; Subjects: Mathematics, Chemistry, Physics, Biology, English (Literature & Language), History & Civics, Geography, Computer Science

Research Interests:

- Acoustic communication, audition and navigation in invertebrates
- Complex dynamical systems and neuroethology
- Central Pattern Generators: rhythmic pattern production and recognition

Research Projects:

-Ongoing:

- Central Pattern Generators: Building a dynamical model for rhythmic pattern generation and recognition in crickets under Dr. K Bittu.
- Building a ground-truth spike-sorting pipeline to compare with existing spike sorting software, to analyse multichannel neural data.
- Diverseneuro.org a survey based study into inclusivness and diversity in the neuroscience academia.
- Covalent Magnetic Tweezer: Literature review; Optimizing the code-base for the existing tweezer under Dr. Shubhasis Haldar and Debayan Gupta, and assembling a new tweezer.

-Past Projects:

- Decoding neural data from Steinmetz, et al. to predict erroneous decision making in trained mice.
- Behavioral experiments to study *Onomarchus uninotatus* audition: Assisted Ph.D students in designing and conducting their experiments, and collecting data.
- Classical Hallucinogens (review project)
- Mirror Neurons (review project)

Technical Skills:

LINUX, C, Python, R, MATLAB

Honours and Awards:

- Dean's List Spring Semester 2019 CGPA of 3.66/4, Summer Semester 2019 CGPA of 3.7/4
- Topper in Biology, 99% in ISC
- Topper in Computer Science, 99% in ICSE
- First Runners Up in Creative Writing, National Literary Competitions, ISC 2016
- Winner Kerala State Creative Writing Competition, ISC 2016
- Winner Western Group and Solo Music, All Kerala Cultural Competitions, ISC 2016

Conferences Attended:

- No Garland Neuroscience, 2020 IISER Pune
- JuliaCon 2020
- Animal Behavior Society Conference 2020
- Insect Navigation Workshop 2020, USussex
- ICMNS 2020
- Neuromatch 1.0, 2.0
- ViDA 2020: Virtual Dopamine Conference
- OCNS*2020 : Computational Neuroscience conference
- KnowDis Data Science: Machine Learning Day (Organizing volunteer, attendee)

Leadership roles:

- -> Co-founder of Diverseneuro.org: A collaborative research venture between IISER Pune and Ashoka University; Aims to study the international academic demographic in neuroscience inorder to help inclusive policy-making.
- -> President : Vistaar, Music Society, Ashoka University (2019-20)
 - Brought about policy changes with regards to University facilities dispensed via the Society

- Role as chief negotiater with the University Administration, and communicater to the student body
- Organized multiple stand-alone and collaborative oncampus events
- Shifted focus to building an inclusive, collaborative atmosphere for growth of musical engagement on campus
- -> House Captain (2015), Junior Captain (2014), HSVN School.

Extra Curriculars:

-Women in Computer Science - Events Team (2019 -)

-Writing:

- Kalinga Magazine: Kalinga is a satire magazine at Ashoka University. The magazine is available on Medium. I ran the then Save The Date Column, as Richard Tater.
- Pehachaan, First and Second Issues: Pehchaan is Ashoka's only print magazine. Article: *Khayaal*, Spring 2019 Edition.
- -Quizzing QuizSoc Ashoka University; Kerala Quizzers
- -Ministry of Wellbeing: Infirmary and Sexual Health Department,
 Ashoka University (2019 20)
- -Design and Illustration

-Volunteering and Event Organization:

- The Neuroscience Outreach Network, Princeton, NJ. Outreach volunteer (2020 -)
- KnowDis Data Science Conference at IIT Delhi (2019)
- <u>Shoulder to Shoulder</u> (2016): An initiative to provide a platform to enable discourse on issues pertaining to gender, and disparity, among students of schools in Thrissur, Kerala.
- Car Wash to Fundraise for Pain and Palliative (2015):
 Initiated, planned and organized my peers to wash cars in our neighbourhoods to raise funds for the Pain and Palliative Care Society, and donated the proceeds to their Medicine funds.