Susmi Sharma

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EDUCATION

University of Texas at Dallas, Richardson, Texas *August 2023 – Present*
- PhD in Speech Language and Hearing Sciences

St. John's College, Santa Fe, New Mexico *May 2021*
- Bachelor of Arts in Liberal Arts

RELEVANT COURSEWORK

UC Santa Cruz, Santa Cruz, California
Courses *June 2020 – August 2020*
- Beginning Programming in Python
- Introduction to Statistical Methods and Reasoning

St. John's College, Santa Fe, New Mexico
Independent Intensive Math Study with Kenneth Wolfe *August 2018 – December 2019*
- Calculus I & II
- Vector Calculus
- Differential Equations

RELEVANT EXPERIENCE

University of Texas at Dallas, Richardson, Texas *August 2023 – Present*
Teaching Assistant for Normal Language Development (CLDP 3303)
- In Progress

University of Minnesota, Department of Neuroscience, Minneapolis, Minnesota
Research Specialist at Ghose Lab *November 2021 – December 2022*
- Optimized and estimated parameters of a dynamical systems model to fit LFP data using Kalman Filtering.
- Extended a single channel model to capture spatial dynamics.
- Analyzed the spatial connectivity and dynamics from inferred states of neuronal subpopulations underlying LFP.
- Trained nonhuman primates in the lab to perform challenging visual perception tasks.

New Mexico Tech, Department of Psychology, Socorro, New Mexico
Research Assistant for Neuroscientist Dr. Taffeta Elliott *June 2021 – August 2021*
(Projects: *Social Identity in STEM Majors Research* and *Social Dominance Preference Test on Female Xenopus*)
- Recorded and edited experimental audio and video materials using Audacity and Premiere Pro.
- Completed literature reviews and prepared survey materials referencing relevant research.
- Verified the accuracy of data entered in video files, preparing documents ready for analysis.
- Learned the elements of electrophysiological recordings using psychophysiology recording platform BIOPAC.

St. John's College, Science Laboratory, Santa Fe, New Mexico
Junior Lab Assistant *August 2019 – May 2020*
- Demonstrated electromagnetic phenomena to illustrate essential concepts in the major works of modern physics.
- Tutored students in mathematics and physics to ensure their mastery of the essential concepts.
Freshman Lab Assistant *August 2018 – May 2019*
- Demonstrated correct dissection practices with chick embryos, sheep's pluck, cow's heart, fish, crabs and cats.
- Prepared chemicals and specimens for weekly labs according to laboratory safety protocols.
- Maintained health of 20 Mexican axolotls (salamanders) by monitoring water temperature and purifying water.

Santa Fe Institute, Santa Fe, New Mexico
Computer Science Intern, Social Polarization Research *August 2019 – December 2019*
- Analyzed language, geography, and socio-economic status in Twitter data to understand political polarization.
- Used programs in Python and Pandas to plot graphs and identify essential factors that contribute to tribalism.

POSTER PRESENTATIONS

Society for Neuroscience 2022, San Diego, California
- Modeling the role of neuronal subpopulations in establishing spatial temporal patterns of activity across the cortical surface during visual decision making *November 2022*

The 9th Annual Minnesota Neuromodulation Symposium, University of Minnesota, Minneapolis, Minnesota
- Estimating spatial connectivity patterns in the visual cortex using a neural mass model *April 2022*

HONORS AND AWARDS

Don Cook Student Leadership Award, St, John's College, Santa Fe, New Mexico *May 2021*
- Awarded for outstanding leadership in classes.

Honorable Mention, Junior-Senior Math Challenge, St. John's College, Santa Fe, New Mexico *May 2021*
- Awarded Best Solution to the 2021 Junior-Senior Mathematical Problem.

SKILLS

Computer Skills: Proficient in MS Office Packages, Outlook, Google Docs and video editing software Adobe Premiere.
Computational Skills: Proficient in Matlab and Python Programming Language.
Language Skills: Fluent in English, Nepali, and Hindi