ABHISHEK DAVE

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EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE   Irvine, CA
Doctor of Philosophy **(Ph.D.)** in Cognitive Sciences   2026 (expected)
Master of Science **(M.S.)** in Statistics   2025 (expected)
> **GPA:** 3.79/4; **GRE:** 170/170 Quantitative, 170/170 Verbal, 4.0 AWA; **TOEFL:** 120/120
> **Relevant Coursework:** Machine Learning, Linear Models, Cortical Neuroscience, Neural Time Series, Dynamical Systems

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE (BITS), PILANI   Hyderabad, India
Bachelor of Engineering **(B.Eng. with honors)** in Manufacturing Engineering   2018
Master of Science **(M.Sc. with honors)** in Biological Sciences   2018
> **Cumulative GPA:** 8.20/10 (First Division | UK 1:1 equivalent)
> **Relevant Coursework:** Sustainable and Lean Manufacturing, Product Design, Immunology, Biophysics, Cell Biology

PROFESSIONAL EXPERIENCE

SLEEP, COGNITIVE AGING, AND NEURODEGENERATION (SCAN) LAB, UC IRVINE   **Irvine, CA**
Graduate Researcher   Sept 2021 – Present
- Spearheaded investigations into the cognitive impact of disrupted brain rhythms due to sleep apnea, inflammation, and neurodegeneration in older adults at risk of Alzheimer's disease; identified neural biomarkers of cognitive decline in aging
- Designed and implemented a MATLAB pipeline for signal processing, visualization and statistical analysis of neural, cognitive, and oximetry data, optimizing it with parallelization to enable 4-6x faster batch processing of large biosignal datasets
- Led 6 and contributed significantly to 20+ presentations at 10+ international conferences; co-authored 10+ articles in leading domain journals with domestic and international media coverage; coordinated collaborations with 9 universities in 5 countries

DEPT. OF PSYCHIATRY AND HUMAN BEHAVIOR, UC IRVINE   **Irvine, CA**
Research Specialist and Lab Manager   Nov 2018 – Aug 2021
- Helped establish and conduct operations for $5M+ research program focusing on sleep and cognition in aging and development
- Developed SOPs and orchestrated 100+ sleep studies featuring 128- and 256-electrode neural data collection and cognitive testing with 750+ hours of high-quality physiological data (neural, cardiac, and respiratory) in adolescents and older adults
- Led and trained 15+ research assistants to independently conduct protocol administration, subject interaction, overnight signal acquisition, and cognitive testing; Supervised and guided 4 undergraduate research projects and theses.

BEHAVIORAL MEDICINE RESEARCH LAB, JOHNS HOPKINS UNIVERSITY   **Baltimore, MD**
Visiting Student Researcher (master's thesis)   Feb 2018 – Aug 2018
- Programmed a pipeline to clean and analyze neural (EEG) data from sleep in 100+ women with TMJ disorder (jaw pain), identified a novel neural biomarker of clinically significant nocturnal pain and reported in the Journal of Pain

LEADERSHIP EXPERIENCE

ORGANIZER, SCAN LAB WORKSHOP AND SEMINAR SERIES, UC IRVINE   Aug 2022 – Present
- Conceptualized and led annual seminar series as an interactive platform to provide exposure for early-stage sleep researchers, upskilling and facilitating their career development; regular attendance by 20+ trainees and faculty from 5+ universities
- Spearheaded regular technical workshops for 20+ undergraduate, doctoral and postdoctoral trainees in neural signal processing methods for sleep and cognitive research; training led to grant applications for $6M+ in NIH funding by attendees

GRADUATE TEACHING ASSISTANT, COGNITIVE SCIENCES, UC IRVINE   Sept 2021 – Present
- Co-designed and delivered an award-winning Intro to Cognitive Aging class for 50+ upper-division Psychology undergraduates, emphasizing Socratic discussions to cultivate interest in aging and dementia research
- Led class discussions and provided instructional support for Probability and Inference, Statistical Models, Sleep and Consciousness, and Brain Disorders (150+ students in each, consistently rated among the best TAs by >65% of surveyed class)

ADDITIONAL INFORMATION

Awards: Sleep Research Society Trainee Merit Award (to present at SLEEP 2024); Summer Graduate Fellowship Division of Teaching Excellence & Innovation, UC Irvine (2022, to co-develop Intro to Cognitive Aging class)

Certifications & Training: Lean Six Sigma Green Belt (2016, KPMG), CITI Training: GCP for Clinical Trials with Investigational Drugs and Medical Devices/Biologics (U.S. FDA focus/ICH focus)

Language Proficiency: English (bilingual), Hindi (native), French (limited working)

Technical Skills: Data Analysis (MATLAB, Python, R, SPSS), Adobe Illustrator, LaTeX, Microsoft Office Suite

Interests: Reading (sci-fi/fantasy, tech, biographies), team-based trivia, Brazilian jiu-jitsu, music performance (vocalist)