



Jahanara Nares

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ABOUT ME

Computational Neuroscience Masters Student
interested in emotion, memory and perception

HIGHLIGHTS

- Mathematics (Multivariable Calculus, Differential Equations, Linear Algebra, Multivariable Statistics)
- Programming (Python - 10+ years, Matlab - 6+ years)
- Machine Learning & Data Analysis (Time-Series Analysis, Signal Processing)
- Design (Adobe Illustrator, Photoshop, InDesign - 6+ years, Rhino - beg.)
- Languages (proficient French, basic Spanish, and elementary Mandarin Chinese)

EXPERIENCE

Jan 2025 – Aug 2025: Thesis Research Project
Honors: Distinction (1st Class)
Neurolive @ University College London ICN, London UK
Researching synchrony between eye movements as marker of empathy between audience members during live performance. Utilizing 3D vector geometry to build world model of eye-movement data in coincident with IMU head-movement data taken from PupilLabs eye tracker glasses.

Jun 2024 – Aug 2025: Research Assistant
Vision, Eye-tracking and Comp-Neuro Lab @ King's College London IOPPN, London UK
Aiding in construction of computational model of receptive fields in symmetry detection in the human visual system using a multi-scale phase-based wavelet algorithm. Conducted data analysis in Matlab for human experimental research used in parallel to computational model.
- Working towards 2 publications. Presented at the Applied Vision Association in Dec 2024.

Oct 2024 – Jun 2025: Research Technician
Vision, Eye-tracking and Comp-Neuro Lab @ King's College London IOPPN, London UK
Reconstructing code-base MotionCloud for ecologically-relevant stochastic noise generation based on Fourier space random kernel selection for visual experimentation within relevant vision discipline research.

Jun – Jul 2023: Data Engineering Consultant
Samuel Stubblefield Workshop, Beacon NY
Conducted literature review and created scientific-guide for electroencephalogram (EEG) data usage with Unicorn Hybrid-Black EEG system in use for data-visualization sculptures.

Nov 2021 – Apr 2023: Artist Residency
6-month artist residency exploring cognition and consciousness with Chelsea College of Art in London UK, followed by 1-year collaboration with Pioneer Works institution in Brooklyn NY

Aug 2020 – May 2021: Student Clinic Intern
NASA/JPL, Pasadena CA
Built a mathematical model for probabilistic risk assessment of sample return missions. Worked in a team with four other engineering students. • Utilized R Studio, MATLAB, Multi Attribute Utility Theory (MAUT), bayesian statistics, and biological and chemical threat categorization research to build mathematical risk model.

Jan – May 2020: Student Clinic Intern
Millennium Space Systems, Claremont CA
Built machine learning software in computer vision for satellite positioning. Worked in a team with five other engineering students. • Utilized Python, 3D conic section geometry, pinhole camera approximations, quaternion geometry, k-means, celestial frame of reference, linear algebra transformations and differential equations for position control and refraction elimination.

Jan – May 2020: Research Assistant
Harvey Mudd Flow Imaging Lab, Claremont CA
Assisted in mechanical design for visualization in hypothesizing tail fin dynamics of jumping fish.

EDUCATION

Sep 2024 – Aug 2025: Goldsmiths, University of London, London UK
M.Sc. Computational Cognitive Neuroscience
Honors: Distinction (1st Class)
Relevant Coursework:
Comp-Neuro: Neural Networks, Modelling Cognitive Functions, Cortical Modelling
Research Statistics: Multivariate Statistical Methods, Advanced Quantitative Methods

EDUCATION cont.

2017 – 2021: Harvey Mudd College, Claremont CA
B.Sc. Engineering
Humanities Concentration in Art
Honors: Dean's List
Relevant Coursework:
Mathematics: Multivariable Calculus, Linear Algebra, Differential Equations
Physics: Mechanics & Wave Motion, Electromagnetic Theory & Optics
Engineering: Advanced Systems Engineering I & II, Dynamics of Rigid Bodies, Fluid Mechanics, Structural Mechanics, Materials Engineering, Digital Electronic & Computer Engineering

Jul – Aug 2019: Cooper Union, New York NY
Summer Architecture Intensive

Jul – Aug 2015: Girls Who Code, New York NY
Hosted by AT&T Manhattan
Summer Coding Intensive

Jul – Aug 2014: Oxbridge Academic Summer Program - Cambridge University
Computer Science major and Biomedical Sciences minor

2013 – 2017: United Nations International School, New York NY
International Baccalaureate Diploma
HL Mathematics, Biology and Chemistry
SL Chinese, Psychology and Literature and Performance
Extended Essay in Computer Science

Jul – Aug 2011: Center for Talented Youth - Johns Hopkins University
Hosted by Stanford University
Summer Program in Mathematical Modeling and Poetry