

Siddhant Joshi

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EDUCATION

University of California, San Diego

Expected June 2025

Bachelor of Science in Cognitive Science - Machine Learning and Neural Computation, GPA: 4.0

La Jolla, CA

- Minor in Data Science
- Relevant Coursework: Supervised/Unsupervised Machine Learning Algorithms, Data Science in Practice, Vector Calculus, Linear Algebra, Probability and Statistics, Data Modeling and Analysis, Business Analytics
- Activities: Data Science Students Society, Association for Computing Machinery, Triton Gaming, Phi Sigma Pi Honors Fraternity, Healthlink

EXPERIENCE

Instructional Assistant

September 2023 – Present

UCSD Dept. of Cognitive Science

La Jolla, CA

- Supports classroom instruction via weekly discussion sections, ensuring optimal understanding and retention of course material for diverse groups of students
- Collaborated with professor and rest of the teaching team to formulate questions for quizzes and exams

Financial Director

January 2023 – Present

Triton Gaming

La Jolla, CA

- Implemented an automated financial tracking system using spreadsheets to effectively manage the \$20,000 budget for Triton Gaming Expo 2023, our largest annual event, that attracted over 1,300 attendees
- Producing event analytics using Pandas and Seaborn to provide valuable insights for improving future marketing strategies and sponsorships
- Oversees management of financial records and databases, budgeting, and financial decision-making

Undergraduate Research Assistant

March 2022 – December 2023

Bambah-Mukku Lab, UCSD Dept. of Psychology

La Jolla, CA

- Conducted a comprehensive examination and dissection of hypothalamic POA neuron clusters identified by the novel taxonomy presented in J. Moffitt, D. Bambah-Mukku et al. (2018)
- Developed R-based pipeline using Seurat that leveraged unsupervised clustering techniques and DEG analysis to explore potential sub-clusters within those identified in the aforementioned study

Platform Engineering Intern

June 2023 – August 2023

Nokia Corporation

Sunnyvale, CA

- Spearheaded the solution designing and implementation of a router topology editor in Python, creating custom tools and scripts to facilitate editor configuration management, error tracking, and intuitive platform design
- Contributed to the creation of user stories, sprint planning, and weekly sync-up meetings, ensuring seamless coordination and rapid project delivery

PROJECTS

Computational Analysis of Hypothalamic POA Neuron Clusters | R: Seurat, dplyr, ggplot2

- Conducted a series of data pre-processing, dimensionality reduction, unsupervised clustering, differential gene expression analyses, and statistical hypothesis testing
- Designed and implemented an R-based pipeline to examine POA gene expression signatures and spatial patterns
- Techniques: Louvain method, PCA/UMAP reductions, differential gene expression analysis, statistical testing

Statistical Modeling for Heart Disease Risk Predictions | Python: NumPy, Pandas, Seaborn, scikit-learn

- Implemented two prediction models trained on CDC-provided data to predict heart disease in American patients
- Applied statistical learning methods using data science libraries in Python and achieved 77.14% model accuracy
- Techniques: Data wrangling, multiple logistic regression, PC regression, cross-validation, model selection

SKILLS

Programming Languages: Python, R, MySQL, LaTeX, JavaScript, HTML, CSS

IDE/Tools: G-Suite, Microsoft Office, Git, VSCode, Jupyter, Google Colab, RStudio, Tableau, Linux

Libraries: NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, PyTorch, tidyverse, tidymodels, Seurat

Awards/Certifications: Google Data Analytics Professional Certificate, California State Seal of Biliteracy (Spanish), Eagle Scout (Scouts of America)

Languages: English, Hindi, Spanish