

DYLAN G. BANERJEE

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University of California San Diego

B.S. Mathematics-Computer Science

San Diego, CA

September 2022 – Present

- **Provost Honors:** Spring 2024, Fall 2025
- **Relevant Courses:** Software Engineering, Operating Systems Principles, (*Graduate*) Operating Systems, Data Center Systems, Artificial Intelligence: Probabilistic Reasoning and Decision-Making, Machine Learning: Learning Algorithms, Programming Languages: Principles and Paradigms

PROFESSIONAL EXPERIENCE

American Systems Group

IT Intern/Associate

San Diego, CA

November 2022 – Current

- Maintain an active Tier 3 Secret Clearance
- Troubleshooting technical issues and maintaining computer systems
- Hands-on experience in network administration, software installation, and system configuration

PROJECTS & OUTSIDE EXPERIENCE

Bayesian Network for Stock Direction Prediction with Latent Sentiment

[AI Course Final Project](#)

UC San Diego, CA

September 2025 – December 2025

- Chosen as an *Exemplar* project by the CSE 150A/250A teaching team for future cohorts
- Designed a Bayesian Network with a latent market sentiment variable (bearish/neutral/bullish) to probabilistically predict next-day stock direction using financial indicators, learning hidden states via Expectation–Maximization
- Collaborated in a 4-person team, facilitating communication, coordinating modeling decisions, and helping align technical implementation with probabilistic assumptions to produce a cohesive, high-quality final report

Code In Place - Stanford University

Section Leader

Remote

April 2025 – May 2025

- Taught basic Python concepts to students from around the world
- Strengthened students' understanding of core Python coding paradigms and problem-solving strategies through structured exercises and feedback

Habitizer - Habit Tracking Android Application

Software Engineering Final Project

UC San Diego, CA

January 2025 – March 2025

- Developed an Android habit-tracking application in Java using Android Studio, applying core software engineering principles and design patterns (MVP, Observer, dependency inversion, open-closed principle) to build a modular and maintainable codebase
- Collaborated within a cross-functional student team using Agile workflows, including storyboarding, sprint planning, and burndown/burnup charts, to coordinate development and meet project milestone
- Integrated GitHub pull requests and project boards to manage tasks, track progress, review code changes, and maintain clear communication across the development team.

Instructional Assistant

Introduction to Python at UC San Diego

San Diego, CA

September 2024 – December 2024

- Guided students through learning challenges with patience and clear communication
- Helped groups collaborate effectively by breaking down complex problems into simple steps
- Supported peers during lab sessions by answering questions and providing hands-on assistance
- Encouraged teamwork and a positive learning environment by clarifying misconceptions

ACTIVITIES & LEADERSHIP

Post It With Tritons

Co-Founder and Vice President

San Diego, CA

October 2024 – Present

Snow Club

Club Member

San Diego, CA

October 2023 – Present

SKILLS & INTERESTS

Skills: Java, Git/GitHub, Python, C++, Pandas, NumPy, PyTorch, C, Tailwind CSS, CSS, React, JavaScript, Go, Android App Development, MATLAB, R.

Interests: Skiing, Blackjack, Video Games, Tinkering with Raspberry Pis, Exploring New Cities.