

Diane Poeng

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Technical Skills

Languages: JavaScript, Python, HTML, CSS, C, C++

Frontend: React, Three.js, Bootstrap, Figma

Backend: Node.js, Firebase, SQLite, PostgreSQL, Valkey/Redis

Tools: Git, Linux, Jira, Bash, L^AT_EX, Google Cloud Vision API

Methodologies: Agile Development, SCRUM

Education

University of California, Santa Cruz

June 2025

Bachelor of Science in Computer Science

GPA: 3.69

Relevant Coursework: Algorithms, Data Structures, Intro to Computer Graphics, Software Engineering, Computer Networking, Dynamic Programming, Machine Learning, Large Language Models

Projects

UCSC Economic Trading Using GenAI App

Python, Claude (Anthropic API), Valkey, JavaScript, Bootstrap, PostgreSQL

- Built a real-time economic trading simulator with natural language strategy execution via **LLMs**; tested with over 100 sample strategies and used by 50 participants.
- Designed trading bots using Poisson logic to simulate 50+ high-frequency traders over 3-minute market intervals.
- Developed a live dashboard with sub-250ms updates for price graphs, account tracking, and transaction logs.
- Reduced prompt errors and ambiguous strategy outputs by an estimated 60–70% through structured prompt engineering and validation.

TCG Tracker: Pokemon Card Tracker

Javascript React, Express, Firebase, Node.js

- Built a full-stack web application to evaluate grading value and profitability of card collections; tested on 200+ card uploads.
- Achieved 90% image detection accuracy on a sample set of Pokémon cards using Google Cloud Vision API.
- Used Chart.js to visualize real-time pricing trends and collection value, increasing user engagement during testing.
- Led a 4-person cross-functional team using **Scrum** methodology across 3+ sprints to deliver MVP ahead of deadline.

First-Person Exploration Application

Javascript, Three.js, WebGL

- Designed an immersive 3D exploration app with animated objects and dynamic lighting could be altered using the control panel.
- Integrated textured models and skyboxes, from open source.

Other Experience

Crew Lead – McDonald's

Hilmar, CA

July 2020 – April 2021

- Trained new employees and supervised shift operations, demonstrating leadership and communication skills.
- Streamlined workflows and resolved conflicts in a fast-paced, high-pressure environment.