

# Alan Sheu

Looking to start work in late June 2025

**Machine Learning · NLP · Web Development · Data Science**

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**Portfolio:** [alansheu2004.github.io](https://alansheu2004.github.io)   **LinkedIn:** [linkedin.com/in/alansheu2004](https://linkedin.com/in/alansheu2004)   **Github:** [github.com/alansheu2004](https://github.com/alansheu2004)

## Experience:

### Ecological Modeling Researcher (September 2022 - Present)

*Moeller Lab at UC Santa Barbara*

- Working with the GFDL Labs to incorporate mixotrophs in a biogeochemical ocean model
- Investigated the effects of climate change on global ocean productivity
- Experience in modeling and data analytics with R, Matlab, and Fortran

### Teaching & Mentoring

- Teaching Assistant at UCSB for Intro Game Development TA using C# and Unity (Spring 2024)
- Tutor / Mentor for UCSB CLAS tutoring services in Math & Physics (Winter 2025 - Present)
- Awarded President's Volunteer's Service Award (Gold) as a TA for Mandarin as a second language

## Projects:

### Machine Learning From Scratch

- Implemented Word2Vec word embeddings and Transformers trained on Wiki data
- Created from scratch using Python, Jax, and Google Colab tools

### Data Science (Youtube Predictor & Recipe Recommender)

- Machine Learning tool to predict the view count of a YouTube video using on title, thumbnail, etc.
- Web App to detect available ingredients and recommend recipes around the world
- Utilized Pandas, SKLearn, Pytorch, and R for language processing and image recognition

### Game Development (Neuromancer & Baddies Inc.)

- Developed action and real-time strategy games with the UCSB Gaucho Game Lab
- Worked collaboratively in a large codebase using Unity & C#
- Specialized in Game Design, UI/UX, and Controls

More projects listed on portfolio ([alansheu2004.github.io](https://alansheu2004.github.io))

## Education:

### UC Santa Barbara (Class of 2026) - GPA: 4.00

- *Double Major:* B.S. in Statistics & Data Science, and B.A. in Linguistics: Language & Speech Technologies
- *Notable Coursework:* Statistical Machine Learning, Computational Linguistics, Computer Vision, Time Series Analysis, Large-Scale Data-Driven Inference, UI/UX Design, Bayesian Statistics
- *Activities:* Data Science Club, Gaucho Gaming (Head of Visual Media), Pops Orchestra (PR Lead)
- *Study Abroad:* National University of Singapore - Fall 2024

## Skills:

- *Data & Machine Learning:* R, Pandas, SKLearn, PyTorch, MatLab, MySQL
  - *Web Development:* HTML, CSS, JavaScript, React, Flask, PHP
  - *Programming:* Java, Python, C++, .NET (C#), Git, Jupyter, Unity, Linux
  - *Graphic Design:* Photoshop, Illustrator, Medibang
  - *Languages:* Chinese, English, French
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