Eric Yang

ericyang2727@gmail.com | https://github.com/yangerdanger | Featured Projects

EDUCATION

Cornell University Ithaca NY
Bachelor of Arts in Mathematics, Minor in Computer Science and Game Development 2021-2025
Coursework

- Object Oriented Programming, Intro to Machine Learning, Data Structures and Functional Programming, Algorithm Analysis, Game Development, Linear Algebra, Computer Graphics, Matrix Groups

SPECIALIZED SKILLS

Programming Languages and Skills

- Java, Python, pyTorch, SQL, NumPy, C#, oCaml, MatLab, Data Science, Linux, LibGDX, C++, REST APIs, ETL

WORK EXPERIENCE

Stateable Ithaca, NY
Product Development Intern January 2025-May 2025

- Build, deploy, and maintain secure, scalable REST APIs using AWS, as well as integrate APIs with AWS services like Lambda for serverless architectures.
- Perform Extract, Transform, Load (ETL) tasks using Python, Jupyter Notebooks, and advanced tools.

Mayo Clinic Rochester MN
Department of Radiology Social Media Intern May 2024-August 2024

- Write and edit outreach posts for the Mayo Clinic Radiology Department, as well as analyze social media metrics.

University of Minnesota Hormel Institute Austin MN
Software Intern June 2023-August 2023

- Programmed a Developer Operations workflow for pushing updates using Jenkins and Puppet.
- Learned to work with Linux UI and Rocky Linux shell, building custom docker containers for testing network updates.

PROJECTS

Sweet Sweet Betrayal Ithaca NY
Cornell University February 2025-June 2025

- Developed the game *Sweet Sweet Betrayal,* a multiplayer mobile game for android and apple coded in C++.
- Worked on user interface for player controls and haptics, taking into account user feedback.
- Coded 5+ networked game objects, ensuring consistent client side and host game states.
- Made improvements for Cornell's proprietary game engine, making extensive use of call stack debugging.

Trading Card Database Rochester MN
Independent Project May 2024

- Created a SQL database of trading cards for the game *Magic: The Gathering,* featuring all 27,000+ cards.
- Created a tool where users can optimize their decks through a numpy powered hypergeometric calculator.

Mayo Clinic Cancer Metastasis Detection Project Mayo Clinic
Volunteer Researcher July 2024-September 2024

- Developed tools to determine cancer types from cancer mutation data and patient records.
- Utilized Sklearn and numpy on patient data, classifying and processing medical data.

Rab-Beat Ithaca NY
Cornell University February 2024-July 2024

- Developed the game *Rab-Beat* in a nine person team, featuring a game engine coded from the ground up in LibGDX.
- Created an efficient content creation workflow to playtesting pipeline, halving development time.
- Organized a strategy for informing stakeholders, writing weekly stakeholder reports and practicing Scrum agile development.

Neural Networks Ithaca NY
Cornell University December 2023

- Constructed a neural network in Pytorch that could visually classify characters with 96.2% accuracy.

Kernelized SVM Ithaca NY
Cornell University October 2023

- Built a support vector machine using numpy and pytorch, classifying and sorting data sets using machine learning.
- Coded several kernel methods, applying mathematical techniques to implement RBF and polynomial kernels.

ADDITIONAL EXPERIENCE

Polymath Jr. Online
Researcher June-August 2023

- Conducted independent mathematics research in number theory under the guidance of professor Daniel Condon.
- Collaborated with peers and professors in writing a research paper on using De Bruijn sequences to color graphs.