

Nolan Knievel

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EDUCATION

Cal Poly

B.S. in Computer Science

San Luis Obispo, CA

Expected Graduation – 2027

- *GPA: 3.78*
- Relevant coursework: Data structures, OO design, Computer org, Systems Programing, Discrete Structures, Design and Analysis of Algorithms

PROJECTS

Machine Learning Snake Game – *Personal Project*

- Developed a program that leverages NeuroEvolution of Augmenting Topologies(NEAT) to train an AI agent to play the classic retro snake game
- Refactored an existing snake game into an object-oriented structure, including the capability for concurrent instances to be run
- Gained hands-on experience in AI, neural networks, evolutionary algorithms, and object-oriented programming
- Created neural network visualization functionality to view a given network's structure and watch how it reacts as a snake navigates the map

Zillow Tracker – *Personal Project*

- Created a rental listing tracking program using a Zillow API through RapidAPI, enabling real-time monitoring of new listings based on user-defined criteria
- Utilized a Python-based automation tool to notify users via email when new listings are posted
- Implemented a data comparison algorithm to identify new listings by storing and analyzing previously seen data
- Deployed project to AWS EC2 instance, ensuring proper environment setup

HTTPD - *Systems Programing final project*

- Built a simple web server that supports a subset of HTTP from the ground up
- Incorporated cgi-like functionality that allows program to execute on the server and provide output back to user
- Ensured proper resource management of child processes, memory, and pointers
- Utilized C-based system calls (e.g., fork, exec)

SKILLS

Languages: Java, C, Python, RISC-V Assembly

Libraries: Numpy, Matplotlib, NEAT Python, Pygame

Other: Linux/Unix OS

Other Experience

Orientation Leader

Jan - Sept 2024

Week of Welcome Orientation Program

San Luis Obispo, CA

- Led group of 34 freshmen through college orientation week; Facilitated discussions on important topics including bystander intervention, safety, and inclusion on campus

REI – Store Sales Specialist – Seattle Flagship

June - Sept 2024

- Assisted customers with questions about products, memberships, and sales
- Promoted REI memberships and goods, often out-scoring peers in membership conversion
- Maintained visual standards of the store front

Seattle Boat Company – Fuel Dock / Dockhand / FunShare Boat Rental Assistant

Feb - Sept 2023

- Checked out and assisted FunShare boat rental clients with dockings and departures
- Received and facilitated refueling of incoming boat customers at gas dock
- Managed and cleaned boat rental fleet

Mercer Island Beach Club - Head Lifeguard

Apr 2021 - Aug 2022

- Conducted new-hire onboardings