JOSHUA NEGREANU

Computer Science BS, Mathematics BS, and Artificial Intelligence MS student studying at OSU Honors **å** linkedin.com □ github.com ⊕ joshnegreanu.com **** (503) 734-0196 ☑ negreanj@oregonstate.edu

EDUCATION

Oregon State University Sep 2021 - Jun 2025 **Catlin Gabel School** Sep 2017 - Jun 2021 GPA: 4.00/4.00 Honors College, College of Engineering High School GPA: 4.00/4.00

Undergrad: BS Computer Science (*Artificial Intelligence*)

BS Mathematics (Applied)

Graduate: MS Artificial Intelligence (*Accelerated*, +1 yr)

FRC Robotics Fabrication, Code, CAD, Videography

CommuniCare Volunteer, Nonprofit Fundraising

WORK EXPERIENCE

Thesis Research: Attacks on Stochastic Dueling Bandits

May 2024 - Present

Supervisor: Huazheng Wang

Oregon State University

Analyzing and conceptualizing mathematical framework for action/reward poisoning algorithms within stochastic dueling bandits context (reinforcement learning area used for online recommendation systems). Active member of graduate bandit reading group.

Operating Systems Learning Assistant (CS 374)

Sep 2023 - May 2024

Supervisor: Benjamin Brewster

Oregon State University

- Held office hours, tutored students, aided in debugging. Graded assignments, utilized scripts, and communicated with professor.
- Projects written entirely in C and span areas of network protocols, multithreading, shell creation, file I/O, cryptography, UNIX OS.

Data Structures Learning Assistant (CS 261)

Apr 2023 - Jun 2023

Supervisor: David Hendrix

Oregon State University

- Led students through grading code demos. Required quick adaption to specific student code, assessed level of understanding.
- Mentored students with projects, met weekly with professor and assistants. Assignments on lists, trees, hash tables, queues, heaps.

Gen Engineering Learning Assistant (ENG 101)

Sep 2022 – Dec 2022

Supervisor: Jason Clark

Oregon State University

- Prepared and led recitations alongside fellow assistants. Mentored students on industry programs: COMSOL, MATLAB, Simulink.
- Maintained communication with professor and coordinated meetings regarding class structure and objectives. Graded assignments.

Leadership Circle Volunteer for the Honors College

Sep 2021 – Jun 2022

Supervisor: Toni Doolen

Oregon State University

Devised methods to improve diversity and inclusion in Honors College. Led group discussions, wrote detailed team meeting notes.

SKILLS

Coding Languages Python, C, C++, JavaScript, C#, Java, HTML, SQL, PHP, Assembly

NumPy, PyTorch, SciPy, Pandas, Matplotlib **AI Toolkits** CUDA, OpenMP, OpenCL, OpenGL, SIMD, MPI Multithreading

Agile development, Jest unit/UI-integration testing, Cypress end-to-end testing, GitHub Action workflows **Industry Skills**

Soft Skills Motivated, open-minded, clear and concise, flexible, detail-oriented, respectful, value diversity

Languages English, Romanian (*limited*), Spanish (*limited*)

RELEVANT COURSEWORK

Machine Learning and Data Mining (CS 434)

Stefan Lee

Logistic regression, SVMs, gradient descent, neural networks, decision trees, ensembles, PCA/SVD, KDE, reinforcement learning **Intro to Artificial Intelligence** (CS 331H)

Prasad Tadepalli

Single/multi-agent, search problems (A*), constraint satisfaction, adversarial tree search, alpha-beta pruning, Bayesian networks **Intro to Parallel Programming (CS 475)** Mike Bailey

OpenMP, Amdahl's Law, Moore's Law, functional decomposition, SIMD SSE, hyperthreading, CUDA, DGX, OpenCL, MPI

Operating Systems II (CS 444)

Yipeng (Roger) Song

Bootloader, protected mode, virtual memory, paging, processes, user/kernel, system calls, context-switching, multi-core, IPC Other Courses: Analysis of Algorithms, Intro to Computer Networks, Intro to Databases, Linear Algebra II, Complex Variables

PERSONAL INTERESTS

Sports Ultimate Frisbee Club (Oregon State University), Track (Catlin Gabel varsity), Tae Kwon Do (instructor, demo team) **Outdoors** Rock climbing, hiking, running, mountain biking, snowboarding, kayaking, paddle-boarding, backpacking, camping Creative Piano (9 years, OFMC 3rd Gold Cup, Oregon Duet Competition Winner), guitar, painting, drawing, music production