Annette Tongsak

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Portfolio
LinkedIn
GitHub

PROFILE

Passionate and driven computer science student with a demonstrated history of outstanding academic performance and a strong foundation in technology and research. Proficient in multiple programming languages and creative computer software. Interested in the applications of computer graphics and visualization and seeking opportunities to expand knowledge as a computer scientist.

SKILLS

C/C++	Python	OpenGL	GLSL
Blender	x86 Assembly Language	HTML & CSS	JavaScript & Node.js
Git/GitHub	PyTorch	SQL	Excellent Written and Communication Skills

PROFESSIONAL EXPERIENCE

Undergraduate Research Assistant **Jun 2023 - Present**
Oregon State University, Corvallis, OR
Research assistant under Dr. Yue Zhang within her research group. Focus on computer graphics, data visualization, and machine learning.

Apprenticeships in Science and Engineering (ASE) Internship Assistant **Jun 2023 - Aug 2023**
Oregon State University, Corvallis, OR

- Studied and presented information from 5 research papers related to computer graphics, visualization, and machine learning to high school students
- Collaborated with a graduate student on a wildlife object detection model commissioned by the Oregon Department of Transportation
- Used PyTorch to create a convolutional neural network that classifies images of hand-written digits from the MNIST dataset and diverse photographs from the CIFAR-10 dataset

EDUCATION

Oregon State University **Sep 2022 - Present**
Graduating Jun 2026 | GPA: 3.95 Corvallis, OR
B.S. in Applied Computer Science - Simulation & Game Programming

Westview High School **Sep 2018 - Jun 2022**
GPA: 4.229 Beaverton, OR

PROJECTS

C++ Ray Tracer **Jan - Present**
Constructing a C++ ray tracer following the *Ray Tracing in One Weekend* book series, implementing features like textures, volumes, bounding volume hierarchy, and indirect lighting.

Random Cobweb Generator **Dec 2023**
Developed a random cobweb generator using C++ and OpenGL for my final project in Introduction to Computer Graphics, drawing inspiration from DreamWorks' 2011 paper, "Building and Animating Cobwebs for Antique Sets."

DevDynasty: Full-Stack Ascent **Nov - Dec 2023**

- Collaborated in a team of five to design and develop an interactive web game simulating the full stack internship application process
- Self-taught Three.js and implemented it into the project, allowing for 3D scenes and on-event animations
- Built front-end development (HTML, CSS, JavaScript) and backend functionalities using Node.js and Express
- Selected for Oregon State University's Web Development Hall of Fame

1998 Aibo Commercial (Fan Animated Recreation) **Jul - Aug 2023**
Created a fan-animated recreation of an Aibo commercial using self-taught skills in Blender. Demonstrated proficiency in 3D animation, character modeling and rigging, camera layout, lighting, set building, and editing.

AWARDS

Drucilla Shepard Smith Award **Jul 2023**
Awarded for earning a 4.0 grade point average while attending Oregon State University

Undergraduate Research, Scholarship, and the Arts (URSA) Engage Award Participant **Jan 2023**
Awarded for participation in undergraduate research at Oregon State University

Dean's Honors List **2022 - Present**
Awarded for attaining a GPA of 3.75 or higher with 12+ credits every term

Finley Academic Excellence **Sep 2022 - Present**
Scholarship awarded each term with requirements of full-time enrollment (12+ credit hours), 36 credit hours per year, and minimum 2.50 GPA

Scholastic Art & Writing Awards **2020, 2021**
Earned gold and silver keys in Film & Animation for two original animated short films

CS & MATH COURSES

Computer Graphics Shaders	**Jan 2024 - Mar 2024**
Software Engineering I	**Jan 2024 - Mar 2024**
Introduction to Databases	**Jan 2024 - Mar 2024**
Analysis of Algorithms	**Jan 2024 - Mar 2024**
Introduction to Computer Graphics	**Sep 2023 - Dec 2023**
Linear Algebra I	**Sep 2023 - Dec 2023**
Data Structures	**Sep 2023 - Dec 2023**
Web Development	**Sep 2023 - Dec 2023**
Computer Architecture & Assembly	**Apr 2023 - Jun 2023**
Vector Calculus I	**Apr 2023 - Jun 2023**
Object-Oriented Programming	**Apr 2023 - Jun 2023**