

Colin Pannikkat

650.772.1995 | colinpannikkat@gmail.com | [linkedin.com/in/colinpannikkat](https://www.linkedin.com/in/colinpannikkat) | github.com/colinpannikkat | colinpannikkat.github.io

EDUCATION

Bachelor of Science in Computer Science

Expected June 2026

Oregon State University | GPA: 3.97

Corvallis, OR

- Minors in Economics and Math
- Relevant coursework: **Deep Learning, Machine Learning, Causal Inference, Data Structures, Analysis of Algorithms, Operating Systems**, Mathematical Statistics, Computer Architecture & Assembly Language, Discrete Math, Vector Calculus I, Differential Equations, Linear Algebra I

Master of Science in Artificial Intelligence

Expected June 2027

Oregon State University | GPA: 4.00

Corvallis, OR

- Early completion via the Accelerated Master's Platform.

EXPERIENCE

BPP Lab Assistant

September 2024 – Present

Forest Ecophysiology Lab, OSU

Corvallis, OR

- Refactoring and debugging a process-based stomatal optimization model written in **C++**, addressing numerical instabilities and improving maintainability with **object-oriented programming**.
- Analyzing simulation outputs and generating visualizations using **Python** to study plant responses to climate variations.
- Collaborating with lab members in bi-weekly meetings and managing version control using **Git** and **GitHub**.

QA/QC Intern

July 2024 - September 2024

Zabble Inc.

Remote

- Tested the Zabble Zero mobile app weekly, developing testing plans to identify and document bugs with the goal of improving functionality and user experience.
- Collaborated in an **Agile** workflow using **Jira** to manage and track user stories, story points, and project progress utilizing the **Kanban** framework.

Backend Software Engineer Intern

April 2024 - June 2024

College of Business, OSU

Corvallis, OR

- Developed a Retrieval-Augmented-Generation (**RAG**) pipeline using **LlamaIndex** and **ChromaDB** for efficient query processing and built an API for pipeline interaction with **Flask**, including **JWT**-based authentication.
- Collaborated with a 6-member team and stakeholders to define requirements and track progress through bi-weekly meetings.

Supplemental Instruction Leader

May 2023 – Present

Academic Success Center, OSU

Corvallis, OR

- Leading peer-education study tables for ECON201, Intro to Microeconomics, for 8–12 students per session, implementing the best practices of collaborative learning while synthesizing relevant course content based on course lectures.
- Collaborating with faculty and other SI leaders to align tables with course goals and enhance student outcomes.

Undergraduate Researcher

September 2022 – June 2024

Secure AI Systems Lab (SAIL), OSU

Corvallis, OR

- Led individual research projects regarding evaluation of adversarial perturbations in **NLP**, adversarial jailbreaking of **LLMs**, and evaluation of interpretable bias detection method for LLMs under the mentorship of Asst. Prof. Sanghyun Hong.

PROJECTS

OSU Class Vacancy Notification | Chrome Extension API, React, Python, Flask, MySQL

November 2024

- Deployed the GetTheDamClass extension in a team of four to provide notifications for class vacancies to 36 users, improving time for students access to class enrollment information from 30 minutes to <2 minutes.

MLP for Digit Recognition | Python, NumPy, PyTorch, OpenCV

August 2024

- Implemented a multi-layer perceptron with Gradient Descent using PyTorch for tensor multiplication and backpropagation, achieving 93% test accuracy on the MNIST dataset.

SKILLS

Languages: Python, C, C++, R, JavaScript, TypeScript, HTML/CSS, Java, SQL, Bash

Frameworks: Flask, JWT, FastAPI, React

Libraries: PyTorch, NumPy, Pandas, Scikit-Learn, Matplotlib, StatsModels, Transformers, LlamaIndex, Pydantic

Tools: Git, LaTeX, VSCode, Makefile, ChromaDB

EXTRACURRICULARS

Participant (Winner 4x), Hackathon Club

2022 – Present

Treasurer (Prev. President), Skate Club

2023 – Present

Member, Association for Computing Machinery

2023 – Present

Co-President, Economics Club

2023 – 2024