



JACK LAY

Student of Computer Science

PROFILE

I am a senior computer science student at CU Boulder, on track to graduate in Spring 2024. I plan to pursue a career in software engineering, data analysis, or broader machine learning/AI.

CONTACT

PHONE:
303-810-2423

ON THE WEB:
[Linkedin/In/Jackhlay](#)
[Jackhlay.com](#)

EMAIL:
Jack.lay@colorado.edu
Jackhlay@gmail.com

Featured Projects

Chess Engine

This project combines all aspects of traditional programming I've developed to date. This took the form of harnessing many algorithms, using a diverse set of data structures, and integrating an agent to evaluate current and potential positions, then play the optimal strategy.

Analyzing Patterns in Sports Gambling

In this project, I used Python and common data science libraries like NumPy and Pandas to determine if betting on the point spread would be more profitable than on the underdog for the '07-'08 season through the '22- '23 season.

Chess Analysis Using Neural Networks

In order to strengthen my Machine Learning skills as well as my general programming skills. I wrote and trained a Neural Network to try and predict positional chess Evaluations based on Stockfish data.

(More projects and further details can be found on my website.)

EDUCATION

University of Colorado Boulder

August 2022 – Present; Graduate May 2024

Major: Computer Science

Relevant Courses: Algorithms, OO Design + Analysis, Intro to Data Science, Intro to AI, Machine Learning, Linear Algebra

Western Colorado University

Aug 2020 - May 2022

Major: Computer Science

Relevant Courses: Data Structures, Calc 2, Discrete Math, Technical Writing

University of Colorado Denver

August 2018 – May 2019

Major: Physics

WORK EXPERIENCE

Spectrum

Software Engineer Intern

May–August 2023

Worked in a corporate environment utilizing an agile-scrum framework and wrote a mechanism to track internal metrics of the PCMM system, in order to pinpoint bottlenecks, while also collaborating with fellow interns on challenging problems such as expanding Spectrum's service to underserved areas. Additionally, I volunteered at Food Bank of the Rockies, providing more than 1000 meals to those who are food insecure. Recognized as one of the top 100 internships by popular votes for 2021-2023.

EC Data Systems

Server Tech

May–August 2016-2019, 2021-2022

Supported data center expansion and maintenance through assembly, light configuration, and installation of company servers. Additionally, terminated CAT 5 cables (straight and crossover). Designed an SQL tool to keep track of internal networking, also created a new company website.

J.J. Lay Company

Installation Tech

May–August 2014, 2020

Facilitated the installation of Residential Water Heaters, AC Condensers, and Furnaces, managed warehouse inventory.

SKILLS

Python, Go, C, JavaScript, Java, C++, Agile-Scrum work methodology

Object-oriented and Functional Programming

Soft Skills including networking, adaptability, team collaboration, and presentation skills.

Attention to detail and ability to learn from experience