



PROFILE

I am a 3rd year computer science student at CU Boulder, on track to graduate 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

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 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.

Q Learners w/ OpenAI Gym

In order to strengthen my Machine Learning skills as well as my general programming skills. I wrote a Q Learner, Approx Q Learner, and Deep Q Network and trained them on games from OpenAI's Gym
(More projects and further details can be found on my website.)

JACK LAY

Student of Computer Science

EDUCATION

University of Colorado Boulder

August 2022 – Present; Graduate May 2024

Major: Computer Science

Relevant Courses: Intro to Data Science, Intro to AI, Machine Learning, Technical Writing

Western Colorado University

Aug 2020 - May 2022

Major: Computer Science

Relevant Courses: Calc 2, Discrete Math, Linear Algebra

University of Colorado Denver

August 2018 – May 2019

Major: Physics

Relevant Courses: Calc 1

WORK EXPERIENCE

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, Java, C, C++

Object-oriented and Functional Programming

Microsoft Word, Excel, PowerPoint and other productivity apps

Attention to detail and ability to learn from experience