



PROFILE

I am a software Engineer at Spectrum and CU Boulder alum. I am passionate about software engineering and eager to apply my skills to solve complex problems in the industry.

CONTACT

PHONE:
303-810-2423

ON THE WEB:
[Linkedin/In/Jackhlay](https://www.linkedin.com/in/Jackhlay)
Jackhlay.com

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

Featured Projects

CheatMaps

For my senior capstone project, we made an app to help the Bureau of Land Management track an invasive species of grass (cheat grass). I acted as the backend engineer, writing our local Api using node and express fall semester before migrating, to equivalent AWS services spring semester. Later we added features like post authentication and released the app in both app stores. Through this I gained exposure in Back-end Development, Node, Express, React, and AWS.

SpotOn UI

To assist a separate Capstone project, we were tasked to write software to interface with their drone. We wrote an android app with a highly usable interface that would allow the user to click on a map to direct the drone. Future development will include RTK/Precision GPS and use of construction schematics in place of the map.

Chess Engine

My chess engine is a long term passion project aimed at honing skills in Data Structures, Complex Algorithms, and AI. After a year, I've developed a functional prototype and now refine it further.

JACK LAY

Software Engineer

EDUCATION

University of Colorado Boulder

B.S. in Computer Science, August 2022 – May 2024

Major: Computer Science

Relevant Courses: Algorithms, OO Design + Analysis, Intro to Data Science, Intro to AI, Machine Learning, Linear Algebra, Numerical Methods, Capstone Project I & II

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

June 2024 – Current

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, 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, Java, C, AWS, Go, JavaScript, 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