

Preston Tateyama

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EDUCATION

University Of Colorado Boulder

Boulder, CO

Bachelor of Science in Electrical & Computer Engineering, Minor in Quantum Engineering

Expected May 2028

- GPA: 3.827 — Dean's List: Fall 2024, Spring 2025, Fall 2025, Spring 2026

PROFESSIONAL EXPERIENCE

Geo-technical Engineering Intern

May 2026 – Aug. 2026

Martinez Associates Inc.

Arvada, CO

- Assisted professional engineers and collaborated with various contractors, to verify project compliance.
- Measured slump, air-content, unit-weight, and temperature of multiple concrete samples
- Learned how to fill out technical reports and when to pass/fail unique test results
- Navigated active construction sites alongside their complex project specifications

TECHNICAL PROJECTS

Electronically Driven DC-motor Robot | *SIMetrix, Waveforms, Arduino*

Jan. 2026 – Apr. 2026

- Constructed DC-motor driven robot with voltage compensator, and direction control sub-circuits
- Measured intrinsic motor parameters to calibrate speed-sensor sub-circuit and motor-encoder readings
- Soldered components to Printed Circuit Boards, obtaining H-bridge sub-circuits to drive each side of robot
- Utilized industry oscilloscopes, power supplies, and simulation software to test and refine constructed circuits
- Collaborated in a group of four to help work through technical challenges

Cost-Efficient Rooftop Solar Panels | *MATLAB*

Jan. 2026 – Apr. 2026

- Planned a rooftop photovoltaic energy system, equipped with battery storage, for solar energy arbitrage
- Utilized the System Advisor Model to select a commercially available solar panel and compatible AC inverter
- Forecasted next-day photovoltaic energy generation with three unique models, simulated via a CVX-package
- Compared different input pricing schemes against each forecast model to determine the most effective one

Dijkstra's Dungeon Crawler | *C++, Bash*

Aug. 2025 – Dec. 2025

- Developed a text based dungeon crawler game in C++
- Performed different operations, based on player input from Linux terminal
- Implemented hash-table, priority-queue, and graph data structures (specifically Dijkstra's Algorithm)
- Utilized debugger tools (Valgrind) to ensure no memory leaks were present

Digital & Analog Electronics Intro Project | *Onshape, Arduino, CorelDRAW*

Aug. 2024 – Dec. 2024

- Created a final prototype of Chutes and Ladders using push-buttons and programmable LEDs
- Assisted those with motor disabilities by digitizing the board game pieces, removing physical moves
- Developed cohesive testing methods to improve initial player position accuracy from 80% to 100%
- Learned breadboard circuitry and the fundamentals of an Arduino UNO
- Led and collaborated with teammates to work through challenges during project completion

EXTRACURRICULARS

Kappa Theta Pi | *Professional Technological Fraternity*

Sept. 2024 – Present

- Collaborated with a partner to develop a portable solar-cell phone charger
- Utilized Altium Designer to construct a circuit schematic and Printed Circuit Board design
- Constrained volatile photovoltaic output to steady 5V, via a Buck Converter alongside Schottky Diodes

COMMUNITY SERVICE

Greeley Exchange Club, Greeley Stampede

Jun. 24th, 2023

Bottled Soft-Drink Vendor

Greeley, CO

- Volunteered time to further develop my leadership, networking, and organizational skills
- Assisted other vendors learn the tech-heavy cash register system
- Learned and understood the kind of impact one can have through volunteering