

# William Flynn Yelton

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GitHub: <https://github.com/willyeltoncu?tab=repositories>

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## Education:

**B.S. in Computer Science**  
**University of Colorado Boulder**

**Graduation May 2022**  
**3.35 Cumulative GPA**

**Relevant Computer Science Coursework: Algorithms, Data Structures, Machine Learning, Human Computer Interaction, Artificial Intelligence, Robotics, Data Science, Software Development Methods and Tools, Linear Algebra, Computer Systems, Datacenter Scale Computing, Principles of Programming Languages, Operating Systems, Computer Security, Technical Writing**

## Technical Skills:

*Programming Languages: Python, C, C++, Javascript, Scala, SQL, HTML/CSS*

*Platforms/tools/OS: Linux, Atom, VSCode, Github, Studio3T, MySQLWorkbench, Postgres, MongoDB, Google Cloud Platform, Anaconda*

*Frameworks: AngularJS, Flask, NodeJS, REST*

## Work Experience:

**E-Commerce Team Member; Whole Foods Market**  
**Package Handler; Fedex Ground (Boulder, CO)**

**July 2021 - November 2021**  
**August 2020 - October 2020**

## Project Experience:

**Saber Baseball Capstone, Lead Back End Developer | CU Boulder | Fall 2021-Spring 2022**  
***Curve10***

- Worked as the main back end developer on a project to update and revive a 5-year-old fantasy baseball simulation application.
- Lead the team in updating the backend, which was written in the angular framework, to use ES6 format. Updated all asynchronous functions to make use of async/await calls.
- Used github branching and pull requests to effectively collaborate with the project team.
- Added a “sandbox” mode feature to the simulation tool. The sandbox mode allows the user to run a simulation with any players from their league, even if the player was ruled ineligible by the league.

**Car Driving Agent, Project Team Member | CU Boulder | Spring 2022**

### ***Machine Learning***

- Created an Agent who could learn to play a simple racing game from the OpenAI Gym environment.
- Used the NEAT reinforcement learning algorithm to train our Agent.
- Most of the development time of this project was spent tuning the heuristic function, the function which gives a grade to the agent. Properly rewarding the agent for good driving / bad mistakes was the most challenging part of the project.
- Variations of the code lead to two separate good models being created, a slow safety focused model and then a model that would take “risks” in attempt to maximize speed.

**Kubernetes Deployed Inventory Management System, Developer | CU Boulder | Fall 2021**

### ***Datacenter Scale Computing***

- A simple order and inventory management system for a retail store deployed with kubernetes. A store or many stores would send inventory data to a worker node(s) which populates a simple database.
- The REST front end is used to send data to the worker, keep track of numbers for the inventory and will create itemized receipts for customer orders.
- RabbitMQ and redis were used to implement a simple messaging queue and database respectively.

### **Resume Presentation Web Page, Developer | Personal Project | Spring-Summer 2022**

- A professional webpage as a way to showcase my resume. Also a nice way to present past Computer Science projects. Easily updatable to include future projects.
- The webpage includes all the information on my resume : education and work history, LinkedIn and Github links, notable coding projects.
- The goal behind this project was to be able to showcase my coding projects in a visual way that is not possible through text documents.
- Project showcase section includes description of project along with images or short videos showing functionality.
- Used the Github Pages tool in order to publicly host the webpage.