# TYLER CRANMER

1415 N. Washington St | Denver, Colorado 80203 | 760-644-0291 | tylerc.developer@gmail.com

#### **PROFILE**

Recent graduate from the University of Colorado at Boulder, where I obtained a bachelor's in applied computer science. My degree focused on core computer science principles, data science and machine learning. I have experience building full stack web applications, machine learning predictive models, visualizations and running analytics. My senior year was spent working part time at Index Coop developing web3 applications while finishing my degree.

GitHub | LinkedIn | Website

### **EDUCATION**

Bachelor of Science – Applied Computer Science University of Colorado - Boulder, Colorado Aug 2018 - Dec 2022

Computer Science I (C++), Data Structures (C++), Intro to Data Science (Python), Data Visualization (Python), Data Mining (Python), Machine Learning (Python), Discrete Structures (Python), Software Tools (Git, Agile, SQL, etc.), Algorithms (Python), Computer Systems (C), Cognitive Science (Theory), Principles of Programming Languages (Scala), Cybersecurity, Calculus I, II and Linear Algebra.

GPA 3.77 – Cum Laude

Bachelor of Science – Exercise Science Northern Arizona University – Flagstaff, Arizona

#### **SKILLS**

Python, TypeScript, JavaScript, SQL, GraphQL, Solidity, Next.js, React, Node.js, Django, Flask, AWS, Heroku

## WORK EXPERIENCE

Software Engineer - Index Coop

May 2021 – June 2022

The Index Coop is a web3 / blockchain company that creates and maintains the words leading crypto index products.

- Active member of the engineering, analytics, and finance pods.
- Built an application hosted on AWS that automated the collection, recording and calculations of monthly community contributions for the finance pod using python, SQL, and google sheets.
- Was part of a two-man engineering group that was tasked to build an analytic tool called a subgraph, which collected and recorded all on chain data that pertained to the company's index products. This tool was built using GraphQL and TypeScript.
- Created technical documentation on Solidity, Web3.js and Hardhat.
- Contributed to the creation of the engineering on-boarding process for new developers.

Senior IT Account Manager – Infinity Consulting Solution

Sept 2015 - Sept 2020

ICS is one of the nation's leading staffing and recruiting companies specializing in connecting talented people to the businesses who need them.

- Gathered technical requirements from business stakeholders to provide end-to-end recruitment and hiring solutions for start-up, mid-size, and fortune 100 technology clients.
- Managing full life-cycle technical recruiting processes for various software engineering teams.
- Ranked #2 ICS recruiter in the nation for 2017 and exceeded company placed goals for 2016.

### FEATURED ENGINEERING PROJECTS

Links to each project's codebase is located at www.teewhy.xyz

### Machine Learning Recommendation System

Built a content-based movie recommendation system using multiple machine learning and natural language processing (NLP) techniques. I utilized a data set of over 8000 Netflix Movie and TV shows to create a feature matrix that was used to compute multiple similarity metric scores for each data point. I personally coded two machine learning models and compared them to pre-built ML models.

Technologies: Python, NumPy, Matplotlib, Pandas, Scikit-learn, NLTK

### Credit Card Default Predictor

Analyzed a multivariate data set that consisted of customers credit card information and payments over a 6-month period. This data was used to compare multiple machine learning algorithm performances on predicting if customers would default on their credit card payments.

#### ML Models:

- Logistic Regression Classifier w/ and w/o Grid Search
- Decision Tree Classifier w/ and w/o Grid Search
- Adaptive Boost Classifier w/ Decision Tree
- Random Forest Classifier w/ and w/o Grid Search

Technologies: Python, Pandas, NumPy, Scikit-learn, Seaborn, Matplotlib

# **CNN** Image Classifier

I built a Convolution Neural Network to classify various NFT pictures into their respected collections. This project utilized 6000 pictures from 6 different NFT collections to train and test multiple deep learning models. I was able to build a model that had an accuracy rate of 99%.

Technologies: Python, TensorFlow, Keras, Matplotlib, NumPy

# Quizzex

As a member of a 4-person team, I contributed to the development of a digital flashcard web application designed to assist students in their learning and preparation for coursework. Using Flask and Python for the backend, JavaScript for the frontend, and a MySQL database, we created a comprehensive and user-friendly platform for students to utilize as a study aid.

Technologies: Python, JavaScript, MySQL, HTML5, CSS3, Heroku

#### DeFi Staking Platform

I created a full stack crypto yield generating platform that allows users to earn rewards for holding and supporting specific crypto tokens. The application was built for the Optimism network but can also run on any Ethereum Virtual Machine (EVM)-compatible network.

Technologies: Solidity, TypeScript, Hardhat, useDapp