# VINCENT CORDOVA

#### • DETAILS •

Denver United States 720-436-9017 <u>vlvc.dev@gmail.com</u>

# • LINKS •

linkedin.com/in/vlvcdev/
github.com/vlvcDev

<u>vlvc.dev</u>

#### SKILLS

Python

Java

Dart

JavaScript

C++

**ARM Assembly** 

TensorFlow

PyTorch

spaCy

MPI

Node.js

SQL

MongoDB

Flutter

React

HTML + CSS

Docker

Git

Agile + Scrum

GLSL

Figma

ZenHub

Microsoft Office

Google Cloud + Maps API

OpenAI + Gemini API

Blender

# **INTERNSHIPS**

#### Full Stack App Development Internship at MSU Denver

June 2024 — August 2024

- Designed an AWS lambda script to parse and tag over 300 on-campus events from trusted data sources with 99% accuracy in seconds using Natural Language Processing (NLP) and Geolocation algorithms
- Using Flutter, implemented a cross-platform dynamic map of events with Google Maps, displaying nearly **100** placemarks relative to **6** different categories
- Implemented integral database solutions through a custom built REST API using Firebase for authentication and MongoDB for managing 100,000+ event entries, ensuring scalability and real-time data access
- Successfully presented designs and demos to 10 different shareholders, gaining \$10,000 in extra funding for further development

#### EMPLOYMENT HISTORY

## **Undergraduate Researcher at MSU Denver**

August 2023 — June 2024

- Built and benchmarked an 8 core Raspberry Pi cluster computer with performance peaking at a 12.51x program speedup and 156% efficiency compared to single core performance
- Analyzed the strengths and weaknesses of parallel programming using a message passing interface (MPI4PY) as well as the ideal use cases for parallelization
- Formally presented findings to an audience under the MSU Denver Undergraduate Research Symposium

#### Teaching Assistant and Learning Assistant at MSU Denver

January 2023 — Present

# **EDUCATION**

Bachelor of Science, Metropolitan State University of Denver, 3.32

December 2024

## **EXTRA EXPERIENCE**

#### **Deep Learning Independent Study**

- Fine-tuned and utilized pre-trained deep learning models to generate quiz questions for Computer Science courses, focusing on optimizing model accuracy and engagement through AI-driven content creation.
- Exploring the Alignment Problem in educational assessments, ensuring Al-generated content enhances learning outcomes.

# **NVidia Fundamentals of Deep Learning Certificate**

December 2023

#### **OpenCV TensorFlow-Keras Bootcamp Certificate**

April 2024

# Compute Shader Physarum Simulation, GitHub

Leveraged GPU acceleration to simulate the behavior of slime mold on a 2D pixel map using compute shaders, allowing for **500,000+** simulation actors at once while maintaining **3x** the frame rate of a CPU simulation with **1/10** the simulation size