

Justin Cote

State College, PA, 16801

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EDUCATION

The Pennsylvania State University

College of Engineering

Bachelor of Science in Computer Science

Minor in Entrepreneurship and Innovation in Engineering

State College, PA

Expected Graduation: May 2024

Dean's List

GPA : 3.2

Activities & Clubs:

Ski Club

WORK EXPERIENCE

Multi-Dimensional Integration Advantage

Software Controls Engineer (Intern)

Allentown, PA

May 2022 – Dec. 2022

- Analyzed project requirements and performed technical calculations supporting design solutions
- Organized and created spreadsheets to track clients' systems passwords, IP addresses, setpoints, alarms and input
- Worked independently to ensure that historical data for client was preserved during system shutdown / error
- Wrote scripts in Java and Python to control PLC outputs (motors, latches, etc.) from PLC input devices (sensors)
- Built a custom Network Time Protocol over a wireless network to sync servers and devices too

State Farm Insurance

Summer Intern (Paid)

Fogelsville, PA

June 2019 – Sept. 2019

- Wrote procedures, reports, and technical documents in coherent terminology
- Proposed use of SQL for faster and more complex query parameters
- Utilized Excel equations to manipulate client data to certain types

iCode Edu

Part-Time Position

Remote Position

June 2023 – Aug. 2023

- Tutored students from 4th-11th grade in computer science related courses
- Specifically Cryptocurrency, Web Development, Intro To Python

RELEVANT PROJECTS AND RESEARCH

Research Assistant – Penn State, University Park

March 2023-Dec 2023

- Researching AI blending with Programming Languages
- Focused on using file information to predict types of variables/return in a dynamic program setting
- Utilizing Python libraries to web scrape open source libraries to create dataset

Sentimental Analysis Project (Capstone Project 1) - Penn State, University Park

2023 Fall Semester

- Used a dataset found on Kaggle that provides the comment and the sentimental tag.
- Utilized Python, Tensorflow & Keras libraries, to model Convolution and Recurrent Neural Networks

NFL Fanshop Website (Capstone Project 2) - Penn State, University Park

2023 Fall Semester

- Full Stack development utilizing Reactjs framework and Nodejs (backend).
- Hosted UI using Netlify and set up backend on localhost. Used MySQL to host data.

HeardTHT Mobile App (Personal Pursuit) -

Summer 2022-Present

- Hosts users playlists in one application for creating, editing, transporting, and sharing
- Allows users to share and collaborate on playlists across streaming platforms
- Utilizes open-source APIs and Firebase Firestore
- Currently building in React-Native-Cli and Nodejs

Dynamic Memory Allocation (Capstone Project 3)- Penn State, University Park

2023 Fall Semester

- CMPSC-473 project included writing custom (C Library) methods for Initialization, Malloc, Free, Realloc
- Optimized the throughput and memory to O(n) on a 64 bit, 16 byte aligned machine.

Skills

Python (Programming Language)

Flutter (Programming Language)

Systems Programming (Unix)

JavaScript (Programming Language)

C (Programming Language)

Discrete Math

Node.js (Programming Language)

React.js (Programming Language)

Full Stack Development

Data Structures and Algorithms