PRAHALAD ANAND

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OBJECTIVE

Results driven high schooler with a passion for software development and a focus on artificial intelligence and machine learning

EDUCATION

Vista Ridge High School   **August 2022 - Present**

- LISD Distinguished with Honors
- Current GPA: 3.94
- Endorsements in Multidisciplinary, Arts and Humanities, and STEM

RESEARCH EXPERIENCE

Algoverse AI Research   **July 2024 - December 2024**
Machine Learning and Data Scientist Researcher

- Worked under Kevin Zhu and George Flint as the lead programmer in collaboration with a team of 4 others in order to research the effects of combining K-Shot and GAN techniques in order to produce accurate synthetic datasets
- Identified, processed and cleaned data, created and trained DART model used in determining the accuracy of our synthetic dataset, and developed K-Shot method with the use of several LLMs
- Prepared a paper based on our findings which was accepted to the 2024 SoCAL NLP Symposium

Inspirit AI Research   **June 2024**
Machine Learning and Data Scientist Researcher

- Worked under Jared Greene while collaborating with 6 others to develop a Convolutional Neural Network in order to detect early signs of colorectal cancer
- Identified, processed and cleaned data and fine tuned model layers while using several data analysis techniques
- Presented our findings to over 50 peers and experts in the field

TECHNICAL SKILLS

- Javascript
- React
- HTML
- CSS
- Python
- Canva
- Rust
- Java
- Docker
- AWS
- Google Cloud
- Firebase
- Flask
- SQL
- LaTeX
- Pytorch
- Tensorflow
- Git

SOFT SKILLS

- Strategic planning
- Resource optimization
- Project and vendor management
- Communication and interpersonal skills
- Team leadership
- Adaptability
- Time management

COURSES

- Computer Science 1
- AP Computer Science Principles
- AP Computer Science A
- Advanced Computer Science III
- Advanced Chemistry
- Advanced Biology
- AP Physics 1
- Algebra 2
- Geometry
- Precalculus
- AP Calculus AB
- AP Calculus BC
- Data Science with Python - Berkeley

EXTRA CURRICULAR ACTIVITIES

DECA
August 2022 - Present

- Responsible for the development of strategic plans for major brands such as State Farm which was expected to generate more than $14 million in revenue
- Facilitated collaboration between leaders of international corporations in order to better the workplace environment while increasing employee productivity
- Competed at the regional level in both Financial Operations Research and Hospitality and Tourism Operations Research

Violin Musician
2015 - Present

Orchestral • Chamber • Solo

- Solo violinist for over a decade organizing and performing more than 20 recitals
- Collaborated with over 40 musicians as concertmaster and 1st Chair Violinist in Advanced School Orchestra for over 3 years
- Led a group of 15 musicians in a chamber setting as principal violinist organizing monthly recitals and composing arrangements
- Held charity recitals during the pandemic as lead violinist and composition arrangement organizer for a quintet
- Lead violinist of a quartet for more than 2 years in collaboration with the Northwest School of Music and Velocity Music Academy

Science Fair

A Novel Application of AI to Optimize Carbonaceous Zeolite Structures for Gas and Water Purification
December 2024

- Developed a machine learning model using Pytorch and Pandas in order to accurately predict the optimal structure of Zeolites for multiple use cases

The Use of Deep Learning Algorithms and Linear Discriminant Analysis to Detect Early Signs of Penicillium in Citrus Sinensis
December 2023

- Lead a team of 3 in creating a machine learning model using OpenCV and Tensorflow to analyze images of citrus sinensis at a cellular level in order to detect early signs of Penicillium

Brine Shrimp: What is the ideal amount of salt needed to grow them as fast as possible?
December 2022

- Determined the optimal amount of sodium chloride in the environment in which brine shrimp grow in order to accelerate growth and speed up hatching

UBC-OCEAN Hackathon
September 2023

Organized by Kaggle

- Lead programmer organizing a team of 5 in order to develop a machine learning model which classified types of breast cancer based on images provided within a dataset
- Focused on data collection and cleaning using pandas in order to augment images to allow our model to train effectively

Uber Hackathon
August 2023

Developed Pool

- Lead programmer organizing a team of 4 in order to create and implement a web application which allowed users to create carpools with other users with the primary goal of decreasing environmental impact
- Setup routing between the backend and the frontend with Flask and connected the MySQL database with the application

TechXcelerate Hackathon
July 2023

Developed CarbonWatch

- Lead programmer organizing a team of 4 in order to create and implement an algorithm which calculated a person's carbon footprint and gave recommendations based on their lifestyle
- Setup the connection between the backend and the MySQL database and provided calculations integral to developing the algorithm

COMMUNITY SERVICE EXPERIENCE

Hill Country Community Ministries Thrift Store
Volunteer
July 2024 - Present
144 Hours
- Managed the supply of clothes and toys for lower income families while preparing, cleaning, and stocking inventory
- Implemented novel categorization system for toys and clothes increasing efficiency and productivity by over 300%

Sri Shirdi Sai Baba Temple of Austin
Volunteer
August 2023 - Present
305 Hours
- Provided food for temple visitors after prayer
- Audio technician for organized shows within the temple
- Developed method for maintaining flow of traffic in order to avoid parking jams and overcrowding in the parking lot

Kumon
Volunteer
August 2023 - December 2023
80 Hours
- Assisted children for subjects such as math, history, english, and science
- Tutored children on higher level math concepts such as calculus, algebra, and geometry
- Maintained cleanliness and organization of workspaces both indoors and outdoors

WORK EXPERIENCE

Kumon
Assessment Evaluator
January 2024 - August 2024
100 Hours
- Evaluated and verified student work for accuracy and comprehension on higher level math and english concepts
- Aided in the evaluation of level assessments for local Kumon branches

AWARDS AND CERTIFICATIONS

4rd Place Regional Science Fair
February 2025
- Awarded with the 4rd place award at the Greater Austin Regional Science and Engineering Fair in materials sciences

DECA District Champion
January 2025
- Financial Operations Research District Champion

AP Scholar with Distinction Award
Collegeboard Award of Distinction
July 2024

Inspirit AI Scholars Certificate
Inspirit AI
June 2024

Travel Through Time Honors Recital Certificate
Velocity Music Academy • Northwest School of Music
March 2024

Texas State Science Fair Finalist
March 2024
- Recognized as a State Finalist at the Texas Science and Engineering Fair in microbiology

1st Place Regional Science Fair
January 2024
- Awarded with the 1st place award at the Greater Austin Regional Science and Engineering Fair in microbiology

Blue Ribbon Finalist
January 2024
- Awarded as a Blue Ribbon Finalist at the Greater Austin Regional Science and Engineering Fair in microbiology

DECA Regional Finalist
January 2024
- Hospitality and Tourism Operations Research Regional Finalist

For the Love of Music Honors Recital Certificate
Velocity Music Academy • Northwest School of Music
March 2023

3rd Place Regional Science Fair
January 2023
- Awarded with the 3rd place award at the Greater Austin Regional Science and Engineering Fair in plant sciences