# ANTHONY ZHAI

Skillman, NJ · anthonyznj@gmail.com · (609) 955-1483 · https://anthonyzhai.com · https://www.linkedin.com/in/anthony-zhai

## EDUCATION

## Montgomery High School

Skillman, NJ

GPA: 100.82

Sep 2019 - Jun 2023

Activities: Computer Science Club (President), Science Olympiad (Captain), Blue Moon Music Tutoring, TEAMS (Tests of Engineering Aptitude, Mathematics, and Science), Chamber Orchestra

#### Experience

# Earth Science Informatics (Springer Nature)

Scientific Journal Reviewer

Nov 2022 - Present

• Reviewer for ESIN, a journal on computer applications for Earth and space science (2.71 impact factor).

## Princeton University

Machine Learning Research Intern

Jun 2022 - Aug 2022

• Used deep learning to model power magnetic core loss with PyTorch, Tensorflow, Pandas, and Numpy as one of less than 40 participants selected in the Laboratory Learning Program.

# The Writing Institute of Princeton

Software Developer Intern

Jun 2021 - Aug 2021

• Developed code for automating the collection of books and their metadata, using Python and Selenium.

# Montgomery Computer Science Club

President, Executive Organizer

Jul 2021 - Present

• Mentored students in weekly workshops and hosted national competitions. Organized school's first ever hybrid hackathon, MontyHacks, with over 180 participants from over 60 schools across the world.

#### SKILLS

Programming Languages: Python, Dart, Javascript, HTML / CSS, C++, Java

#### Relevant Coursework

# Deep Learning Specialization

DeepLearning.AI (with credentials)

## Machine Learning

Stanford University (Coursera)

## Single-Variable Calculus, Multivariable Calculus, Linear Algebra

 $MIT\ OpenCourseWare$ 

## Projects

CGBNet: A Deep Learning Framework for Compost Classification Python, Tensorflow, Keras,

Computer Vision, Deep Learning, Transfer Learning

CGBNet is a framework for classifying compost to help automate composting. Co-first authored research article for CGBNet that was published in IEEE Access (3.48 impact factor and 30% acceptance rate).

# ${\bf Connect Anon}\ Flutter,\ Firebase,\ Figma,\ Cloud\ Firestore$

Connect Anonymous is a project to help teenagers connect with others from the same high school through anonymous chatting and texting. Developed the mobile app using Flutter and Firebase.

Visionary Python, Django, Django-Rest-Framework, Flutter, Dart, Tensorflow, Keras, NLP Visionary is an app that helps the visually impaired interact with the world through text OCR, object detection, and image captioning through Natural Language Processing and computer vision.

# AWARDS

# NASA Earth System Science Award

Nokia Bell Labs North Jersey Regional Science Fair

1 of 2 recipients for NASA Earth System Science Award, awarded to projects which incorporate studies of different spheres of the Earth system for sustainable development. Sponsored by NASA. Mar 2022

### Overall 2nd Place

HealthHacks (PennApps x Wharton Undergraduate Healthcare Club)

Created Retro, an application that provides easy access to critical information for first responders in emergency situations and decentralizes the storage of medical records.

Mar 2022

# Tests of Engineering Aptitude, Mathematics, and Science

Technology Student Association

Placed 1st in the state and 1st nationally in the TEAMS competition (based on cumulative score). Apr 2020