ANTHONY ZHAI

Skillman, NJ · anthonyznj@gmail.com · (609) 955-1483 ·
https://www.linkedin.com/in/anthony-zhai-275182210/

EDUCATION

Montgomery High School   Skillman, NJ
GPA: 99.73   Sep 2019 - Jun 2023

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

EXPERIENCE

The Writing Institute of Princeton   Princeton, NJ
Software Developer Intern   Aug 2021 - Aug 2021
- Developed code for automating the collection of books and their metadata, using Python and Selenium.

Tutor Trac
Class Director, Tutor   Jul 2021 - Present
- Responsbile for organizing a team of tutors, planning lessons, and instructing middle-school students for math, science, and language curricula. Helped raise $4000+ towards COVID relief.

SKILLS

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

RELEVANT COURSEWORK

Neural Networks and Deep Learning, Structuring Machine Learning Projects, Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization
DeepLearning.AI (with credentials)

Machine Learning
Stanford University (Coursera)

Single-Variable Calculus, Multivariable Calculus, Linear Algebra
MIT OpenCourseWare

AP Chemistry, AP Biology, AP Calculus BC, Honors Physics
Montgomery High School

PROJECTS

CGBNet: A Deep Learning Framework for Compost Classification *Python, Tensorflow, Keras, Computer Vision, Deep Learning, Transfer Learning*
CGBNet is the first Deep Neural Net that classifies between different types of compost. It uses transfer learning and a novel dataset with 20 different types of objects to classify green and brown compost with an accuracy of 90%. Further work on CGBNet will bring it into a pipeline to automate composting with robots.

ConnectAnon *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 industry-changing application that provides valuable information to first responders in the case of emergency and decentralizes the storage of medical records.   Mar 2022

Best High School Visualization   Vizathon 2021
Awarded best high school award for the Harvard Coronavirus Visualization Team's Vizathon 2021. Mapped global trends in mental health.   Aug 2021

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