

ANTHONY ZHAI

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EDUCATION

Montgomery High School

GPA: 100.29

Skillman, NJ

Sep 2019 - Jun 2023

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

EXPERIENCE

Princeton University

Machine Learning Research Intern

Princeton, NJ

Jun 2022 - Aug 2022

- Used deep learning to model power magnetic core loss with PyTorch, Tensorflow, Pandas, and Numpy.

The Writing Institute of Princeton

Software Developer Intern

Princeton, NJ

Jun 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

- Responsible for organizing a team of tutors, planning lessons, and instructing middle-school students for math, science, and language curricula. Helped raise \$6000+ 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 a framework for classifying compost, one of the most important steps in automating composting. Co-first authored research article for CGBNet that was published in IEEE Access, an IEEE journal with a 3.48 impact factor and 30% acceptance rate.

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

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