BILL ZHANG

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EDUCATION

University of California, Santa Cruz

Bachelor of Science in Computer Science GPA: 3.64

Santa Cruz, CA Sep 2020 - Mar 2023

University of Southern California

Master of Science in Computer Science - Artificial Intelligence

Work Experience

X-Camp Academy Teaching Assistant San Jose, CA Jul 2022 - Present

• Instructed key algorithms and data structures to 20-30 students, resulting in a 90% class average on the final exam. Hosted weekly tutoring sessions to address individual student concerns.

- Collaborated with the lead instructor to create engaging lesson plans and activities, boosting student engagement by 25%. Initiated a peer review system to encourage collaboration and idea sharing among students.
- Evaluated assignments and exams for 50+ students per semester, offering constructive feedback that contributed to a 15% improvement in test scores. Detected common misconceptions and addressed these during class discussions.
- Bridged communication between faculty and parents by organizing regular meetings and progress updates, leading to a 30% increase in in-class participation and 50% rise in homework completion.

SKILLS

Programming Languages: C, C++, Java, Python, Dart, Javascript, Typescript, Haskell ML Libraries: Tensorflow, Keras, NumPy, Pandas, Scikit Learn, OpenCV

Visualization/Other Libraries: MatplotLib, Seaborn, D3Js

Projects

 $\textbf{Paddy Plant Prognosis} \ \textit{Tensorflow, Vite, Flask, TailwindCSS} \\ \text{https://www.paddyplantprognosis.tech/https://github.com/IdkwhatImD0ing/PaddyPlantPrognosis/blob/main/modelv2.ipynb} \\ \text{https://github.com/IdkwhatImD0ing/PaddyPlantPrognosis/blob/main/modelv2.ipynb} \\ \text{https://github.com/Idkwhat$

Collaborated with a team to develop an app aiding farmers in identifying paddy crop diseases using computer vision, achieving 97% accuracy via Mobile Net Transfer Learning.

 $\label{lem:sink} \textbf{Sink or Swim } \textit{NextJS}, \textit{Flask}, \textit{Tensorflow}, \textit{TailwindCSS}, \textit{OpenAI}, \textit{Framer Motion} & \textit{https://sos.art3m1s.me/https://github.com/simon-quach/sink-or-swim/blob/main/titanic.ipynb} \\$

Led a group project to create a web app predicting Titanic survival chances and generating narratives, utilizing a custom RNN with 84% accuracy.

ASL Recognition Tensorflow, Pandas, Sklearn, NumPy, Keras

https://github.com/IdkwhatImD0ing/Kaggle/blob/main/SignLanguage/MobileOther.py Developed a machine learning-based Snapchat filter for recognizing American Sign Language, used for

Developed a machine learning-based Snapchat filter for recognizing American Sign Language, used for learning or interpretation. Achieved 91.6% test accuracy using MobileNetV2 for transfer learning.

 $\label{lem:penmanship} \textbf{PenmanshipPro} \ \textit{React, Express, Tensorflow, Keras} \\ \text{https://kazitasin07.wixsite.com/penmenshipro-https://github.com/Renaud2002/PenmanshipPro-TLE/blob/main/model.ipynb} \\ \text{Renaud2002/PenmanshipPro-TLE/blob/main/model.ipynb} \\ \text{Renaud2002/PenmanshipPro-TLE/blob/main/model.ipyn$

Coordinated with a team to design a web app enhancing handwriting skills through interactive exercises, achieving 86% accuracy with a custom CNN model.

Disease Classification Sklearn, Numpy, Seaborn, MatplotLib

https://github.com/IdkwhatImD0ing/Kaggle/blob/main/Diseases/model.ipynb

Built a disease classification tool using Sklearn classifiers on a Kaggle Dataset. Final classifier achieved 100% accuracy.

Eat Safely React, Flask, Tensorflow, Pandas, MatplotLib, Numpy https://eatsafely.art3m1s.me https://github.com/IdkwhatImD0ing/EatSafely/blob/main/model.ipynb

Developed EatSafely, a web app detecting spoiled fruits using image recognition, achieving 97% accuracy with Mobile Net Transfer Learning.

Relevant Coursework

Artificial Intelligence, Applied Machine Learning, Computer Vision