

# ZHUO (DANNY) CHEN

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## EDUCATION

### Texas A&M University

2020 - 2023

*B.S. in Computer Science, Economics Minor, Dean's Honor Roll*

*GPA: 4.0/4.0*

- Courses: Data Structures & Algorithms, Computer Organization, Programming Languages, Discrete Math, Linear Algebra, Probability & Statistics, Multivariable Calculus

## EXPERIENCE

### TAMU RoboMaster

College Station, TX

*Software Engineer on Computer Vision Team*

*Feb. 2021 - June. 2021*

- Trained a deep learning model (**YoloV4**) with 65% mAP to detect red and blue armor plates on moving robots
- Improved the model's range by 5% through data analyzation and augmentation on 11,000+ training images

### TAMU Autodrive

College Station, TX

*Undergraduate Researcher | Lab directed by Jian Tao, Dept CS&E, TAMU*

*Jan. 2021 - May. 2021*

- Successfully navigated a self driving car around a racetrack in **CARLA** simulator using Stanley and PID control algorithms
- Developed a UNet machine learning model to segment roads in 1,000 CARLA images

### Aggie Coding Club

College Station, TX

*Project Manager, Full-Stack Developer | Aggie Registration Alert*

*Sept. 2020 - Dec. 2020*

- Led a MERN stack application to notify students when filled courses are available during class registration
- Determined the project scope and delegated tasks to 17 members; worked on frontend, database management, email sender, and data integration
- Reduced the class search time by **100%** and maximized the probability to get a filled course

### Computer Science Club

Plano, TX

*Senior Executive Officer*

*Aug. 2019 - June 2020*

- Led teams to win at multiple programming competitions including Lockheed Martin CodeQuest
- Served as a team mentor for 40+ high schoolers, lectured on algorithms and data structures weekly
- Coordinated an annual programming contest with **150+** high schoolers to encourage involvement in CS
- Interviewed 20+ potential candidates through behavioral and algorithmic questions

## PROJECTS

### Chinesepedia

*July 2021*

- Revamped a MERN stack web application to help users learn and memorize 5000 Chinese characters
- Optimized the UI to reduce mouse clicks by 50%; Proposed an algorithm to estimate the number of Chinese characters a user knows in 3 minutes; currently with 160+ users
- Implemented Google Login; stored data in JSON files; tested website prior to live deployment on Heroku

### Facial Recognition Lock

*June 2021*

- Built a facial recognition software using OpenCV and Python to provide secured entrances for schools
- Created CRUD operations with Firebase to quickly add and retrieve face encodings from the database

### StockBot

*Sept. 2020*

- Developed a Discord bot with Python to facilitate the discussion of trading and investing for college students
- Fetched real-time stock data from Yahoo Finance with BeautifulSoup by parsing their HTML code
- Awarded best overall, most creative, and most useful bot for Capsher Coding Challenge 2020

## SKILLS & INTERESTS

**Languages:** Proficient in Python, C++; Familiar with Java, JavaScript, HTML/CSS, SQL, LaTeX, Linux Commands

**Technologies:** Tensorflow, Numpy, Pandas, MongoDB, ReactJS, NodeJS, Git, Heroku, Google Cloud Platform (GCP), Hadoop, Excel, Vim

**Soft Skills:** Bilingual Communication (English, Chinese), Time Management

**Interests:** Machine Learning, Software Development, Competitive Programming, Trading

**Selected Awards:** 2nd Place Pariveda Solutions Challenge 2020, 2nd Place Lockheed Martin CodeQuest 2020, 8th Place (2nd class year) TAMU Programming Contest 2020