# Yuxuan Fan

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## **EDUCATION**

#### **UCSAN DIEGO**

**B.S. IN DATA SCIENCE** 

Sept 2018 - June 2022 • La Jolla, CA Thurgood Marshall College Halicioglu Data Science Institute Provost Honor Cum. GPA: 3.96 / 4.00 Major GPA: 3.98 / 4.00

## SKILLS

## **LANGUAGE**

Mandarin (Simplified Chinese) • English • Korean

## **PROGRAMMING LANGUAGE**

Python • Java • SQL • JavaScript • HTML • CSS • C++ • Scala

#### LIBRARIES AND FRAMEWORKS

Scikit-learn • Pandas • Pytorch •
PostgreSQL • Google Firebase • Spark •
Flask • ReactJS • NodeJS • ExpressJS

## LINKS

Personal:// yuxuan.fan Github:// 991231 LinkedIn:// yxfan

## COURSEWORK

#### **UNDERGRADUATE**

Data Structure and Algorithm
Object-oriented Programming
Machine Learning
Data Mining
Database
Data Visualization
Deep Learning
Computer Vision
Natural Language Processing

## **EXPERIENCE**

## UC SAN DIEGO ACADEMIC TUTOR

September 2019 - Present · La Jolla, CA

- Tutored 3 courses (DSC 20/30/40B) that introduce programming in **Python** and **Java**, basic **data structure and algorithms**, and **machine learning** theories.
- **Designed 10+ programming assignments** on data structure applications and object-oriented programming.
- Helped 300+ students by hosting online and in-person office hours.

## UCSD CHINESE COMPUTER COMMUNITY PROJECT MANAGER

September 2019 - Present • La Jolla, CA

- Managed a 10-person team that helps members to improve data analysis skills and gain real-world experience by participating in Kaggle competitions.
- Led study groups to learn machine learning and deep learning concepts, and hosted tutorials on popular frameworks (Scikit-learn and Pytorch).

## **PROJECTS**

#### SOCIAL CODING ARENA Code

- A web application that allows users to host customized coding contests, invite other users, and join public coding contests through the lobby.
- Designed product concepts and user flow, designed database schema and implemented database queries using **Google Firebase**, and implemented the frontend of several pages with **ReactJS**.
- The prototype won a finalist award (7th/83) in Unicode SC+ Hackathon 2020. Expected to deploy the final product by the end of 2020.

#### **NEW YORK AIRBNB PRICE PREDICTION** Code • Presentation

- A data mining project that predicts the price of New York Airbnb listings using their metadata, textual descriptions, and review scores.
- Implemented data pre-processing pipeline with **Pandas** and **Scikit-learn**, and fitted a single **Light GBM** model. Won 1st/125 in UCSD DSC 190 A00 Data Mining Challenge with a public RMSE score of 76.37.

#### **IMAGE AUGMENTATION DEMO** Website · Code

- A web application that provides an interface to perform image augmentations and inspect augmented images in real-time.
- Implemented frontend with **ReactJS** and **Bootstrap 4**, implemented augmentation API with **Flask**, and deployed the application with **Heroku**.

#### INTELLIBEAR Code

- A dashboard-liked web application that provides sales data management, forecasting and analytics for restaurants.
- Implemented a time-series data processing and forecasting pipeline with **Pandas** and dashboard page prototype with **vanilla HTML/CSS/JS**.

## DATA VISUALIZATION: EVOLUTION OF TIKTOK Website · Code

• An interactive and responsive data visualization for TikTok's growth statistics implemented with vanilla HTML/CSS and HighCharts.

## **UBER TRAVEL TIME FORECASTS** Report

- A business proposal that aims to enhance Uber user experience by analyzing travel time forecasts. Won 2nd/15 in UCSD DataHacks 2020 Business Track.
- Performed EDA with **Pandas** and data visualization with **Pyplot**.