Mr. Haoran MAO

Mobile Phone: 86-15623278960 E-mail: haoran_mao@163.com



Education Background

09/2017-06/2021 Huazhong Agricultural University

Major: Information Management and Information System GPA: 3.27/4.0

Degree: Bachelor of Management Average Score: 83.38

Certificate: CET-6, IELTS 6.5, NCRE Level II of Python

Awards and Honors

- 2021 "Three good" student of the 2021 public Management Academic of Huazhong Agricultural University
- 2020 The winning prize of the 6th Internet skills competition of Huazhong Agricultural University
- 2019 The third prize of "Internet plus" innovation and entrepreneurship competition of Hubei University of Technology
- 2018 Outstanding member of Huazhong Agricultural University

Internship & Project Experience

08/2022-Present Algorithm Engineer Shenzhen Autocruis Technology Co., Ltd (Wuhan Branch)

Object Detection of Gestures

- Introduction: The function is a part of OMS(Occupancy Monitoring System), aims to identify the position of the passengers' hands and classify into the right gestures, such as "one", "two", "five", "good", "rock", "ok" and so on. The dataset contains over 140 thousand pictures.
- ➤ Process the annotated data and convert labels format. Train and optimize the models for deep learning. Use Yolov5-m as the backbone and the accuracy reaches 97.8% on mAP@.5 and 87% on mAP@.5:.95.

Regression Task of Hand Key Points

- Introduction: The function is based on gesture detection, aims to achieve some functions by locating 21 key bone points on each hand and tracking their position changes. For instance, showing "five" gesture with horizontal movement means switching car music, and showing "one" gesture and drawing a circle means adjusting volume. The dataset contains over 70 thousand pictures.
- > Train and optimize the models for deep learning. Use ReXNetV1 as backbone and the model is stable in most cases.

Classification of Open Eyes and Closed Eyes

- Introduction: The function is a part of DMS(Driver Monitoring System), assists in judging whether the driver is tired by the state of his/her eyes, include class of "open", "close" and "unknown". The dataset contains over 220 thousand pictures.
- > Train and optimize the models for deep learning. Use Resnet18, EfficientNet_b0 and Yolov5s-cls as the backbones and the accuracy of model reaches 99.8% on test set at last.

09/2020-05/2021 Graduation Thesis Huazhong Agricultural University Instructor: Dawei Wen Design and Implementation of Common Hospital Materials Information Management System

- Introduction: The goal of the system design is to realize the convenient management function and information integration function of medical users and administrators on personnel and material information, improve work efficiency, and promote the hospital to provide more convenient medical services.
- > Determined the business process of management system through system requirement analysis and system design.
- ➤ Used PHP language to edit system web side, MySQL database in the background, and Python language to interact with PHP to realize data visualization.

07/2020-08/2020 Front-End Developer Shenzhen Defan Technology Co., Ltd

- Participated in module programming of *Public Information Management Subsystem*.
- Participated in programming the function of preview and print of mediation files.

11/2017-12/2018 Secretary Youth Volunteer Work Department of Huazhong Agricultural University

- Introduction: This department belongs to the school's volunteer association and is responsible for organizing voluntary activities, won the provincial gold medal for voluntary activities.
- Made the plan of voluntary activities and wrote project documents. Participated in voluntary activities for over 40 hours.
- > Assessed the voluntary activities of each class and managed the background data of Zhi Yuan Hui App.