Tiancheng Jiao

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Education

University of Michigan — Ann Arbor, MI
Computer Engineering, College of Engineering — *Aug. 2023 – Present*

Shanghai Jiao Tong University — Shanghai, China
Electrical and Computer Engineering, UM-SJTU Joint Institute — *Aug. 2021 – Aug. 2023*

Research Projects

Study on Intelligent Detection Algorithm Based on Camera Calibration and Object Recognition
Shanghai Jiao Tong University, *Team leader* — *Apr. 2022 - Feb. 2023*

- Lead a five-member team to initiate a project aiming to reduce the deviation of previous algorithm
- Self-study python to develop a new algorithm, increase the precision of circle identification and simplify the process
- Lead members to work on patent preparation procedure

Next Generation AGV Intelligent Scheduling System Based on Artificial Intelligence
Shanghai Jiao Tong University, *Key member* — *Jun. 2022 - Jun. 2023*

- Design an AGV scheduling system with openTCS
- Utilized Python to make a simple API for the scheduling program
- Improve the routing strategy to avoid crashing and increase efficiency

Personal Projects

courseSelector: An automatic course selection tool for UM-SJTU Joint Institute. It can use multiple threads to select courses quickly at the beginning of course selection, or continousuly check whether a course has available seats, and select it automatically if it does.

auto-duo: Automatically approve each Duo push request, no need to click on the cellphone.

FeishuGPT: Use ChatGPT in Feishu, through the Feishu bot.

myHttp: A very simple http library in python, can send a http request in only one line of code.

mySecrets: My own base64, hash and symmetric encryption algorithm.

autoDropbox: A simple API for Dropbox. Upload and download files from Dropbox in python.

outlook: A simple email sender for Outlook in python. Through Outlook API, not SMTP.

For more about my work and projects:

GitHub: github.com/jtc1246

PyPI: pypi.org/user/jtc1246

Extracurricular Activities

Michigan Data Science Team

- Meet every week to work on a project each semester, and present at the end of the semester
- Work on "Real vs Fake Faces", to distinguish whether a face is real or photoshopped
- Learn about machine learning theories, techniques, and tools, such as PyTorch

Alternate Reality Initiative, UMich

- Learn about some tools to make VR games, such as Unity and Blender
- Try and experience some VR games and applications, also the games we made

Quantitative Investment Society, UMich

- Meet with the team every week to discuss about some strategies in quantitative trading
- Doing some projects and infrastructure in quantitative trading

Skills

Programming laguages: Python, C++, C, Java, SQL, JavaScript

Tools: PyTorch, OpenCV, Git, Docker