# 张炅焱 ZHANG JIONGYAN

- Nationality: Chinese
- Location: Fakultät für Luftfahrt, Raumfahrt und Geodäsie, Technical University of Munich, Arcisstraße 21D-80333 Munich, Germany
- Academic Email: jiongyan.zhang@tum.de
- Business Email: hinczhang@gmail.com



# **EDUCATION BACKGROUND**

# Anhui Qingyang Middle School (high school diploma), China China's College Entrance Examination: 630 (rank: 1480/499,000, TOP 3‰) Wuhan University, China Bachelor of Engineering in the Department of Geographic Information Engineering, School of Remote Sensing and Information Engineering | Cumulative GPA: 86.8/100(major: 88.4) Technische Universität München, Deutschland Kartographie Technische Universität Wien, Österreich Kartographie

## PROFESSIONAL EXPERIENCE

#### 1. Research on Nighttime Remote Sensing

2018.04 - 2019.04

■ Based on the remote sensing data of night-time light obtained by DMSP / OLS system, this project analyzes the development status of emerging cities in recent years, pointing out the relationship between cities and the surrounding underdeveloped areas.

## 2. Human behaviour judgment, clustering and analysis based on human trajectory

2018.01 - 2019.07

- This project mainly records the tracks and obtains the track characteristics of different types of people through deep learning. We can obtain a specific reference and identify the people to whom tracks belong. I mainly conduct data analysis and processing and the development of data acquisition software.
- 3. Research on indoor positioning and navigation

2019.07 - 2020.07

- The primary purpose of this project is to develop an indoor positioning and navigation system in a large shopping mall suitable for daily life by using as few external hardware as possible, to establish the fully automatic system. I am responsible for the main algorithm and mobile & server application development.
- 4. Development of travel assistance app for the disabled

2020.04 - 2020.11

■ This project attempts to extract the data of barrier-free public transport in the current urban environment, and on this basis, provides guidance and suggestions for the disabled to travel more conveniently and smoothly. I mainly conduct background algorithm research and the implementation of mobile terminal programs.

# 5. Research on the relationship between COVID-19 and the global flight network

2020.04 - 2021.06

■ Analyze the impact of the epidemic situation on the flight network. Based on the characteristics of the flight network from January to April 2020, we have carried out the spatiotemporal analysis.

# AWARDS AND CERTIFICATES

S and H prize of MCM/ICM [2018 2019]

Third prize of Mathorcup University Mathematical Modeling Competition [2019]

Second prize of China International Mathematical Modeling Competition [2019]

H prize of Asia and Pacific Mathematical Contest in Modeling [2019]

Wuhan University Scholarship [2017 2018]

Wuhan University Elite Student [2017 2018]

Excellent Graduate Thesis of Wuhan University [2021]

#### WORK EXPERIENCE

ISIP Lab 2020.09 – 2021.06

Job: Research Assistant

Employer: Professor Kun Qin

Responsibility: Assisting to research the complex network based on the flight network and COVID-19 epidemic.

Wuhan University 2021.03 – 2021.06

Job: Teaching Assistant

Employer: Academician of Chinese Academy of Sciences, Prof Gong Jianya, Prof Qin Kun

Responsibility: Assisting to finish the teaching and schoolwork tasks of the course Foundation of GIS.

# ESRI Software R&D Center (Beijing)

2021.04 - 2021.08

Job: Development Intern Employer: Mr. Moxie Zhang

Responsibility: Being responsible for medical image and signal processing, developing the algorithm and taking the

backend server development.

# **EXTRACURRICULAR ACTIVITIES**

#### 1. Algorithm and Front-end developer

2020.09-2021.06

Content: Work to build the NSFC platform to analyze and visualize the data related to the COVID-19 epidemic situation. My task is to analyze the global aviation network.

2. Lecturer 2019.09-2021.06

Content: Teach some technology about computer science and GIS skills.

3. Website administrator 2019.09-2021.06

Content: Develop a schoolwork management system and maintain it.

4. Data operator 2020.08-2020.12

Content: Handle data from Safegraph and Foursquare to help analyze the model of COVID-19's spread.

# **SKILLS**

#### Computer language

C&C++ / Java / Javascript / Python

#### System framework

Hadoop / NodeJs / HDFS / Vue / Android / QT / MFC