# **ZHIYUAN ZHOU**

Southeast University, Nanjing, China, 210096 Email: <u>zhouzhiyuan@seu.edu.cn</u> | Tel: (+86)156-5181-6230

#### RESEARCH INTEREST

My research interests lie at the intersection of Cyber-physical Systems, Data Science, and Artificial
Intelligence. I am interested in finding meaning patterns from large-scale data based on data-driven
modeling, and designing useful prediction algorithms to solve real-world problems in cyber-physical systems
(CPS), such as instance delivery service.

## **EDUCATION**

Southeast University, School of Compute Science and Engineering

Nanjing, China

Global Ranking (US.News # 234, ARWU #151)

M.S., Computer Science and Technology

2021.09 - Present

- Advisor: Prof. Shuai Wang
- Relevant Coursework: Algorithm Design & Analysis, Artificial Intelligence, Complex Network and Social Network Analysis, Cyber-Physical Systems and Its Applications.
- **GPA:** 3.85/4.0 **Average Score:** 89.59/100 **Ranking:** 2/71

Southeast University, School of Compute Science and Engineering

**B.E.**. Software Engineering

Nanjing, China 2017.08 - 2021.06

- Relevant Coursework: Advanced Data Structure, Introduction to Artificial Intelligence, Computer Graphics, Introduction to Deep Learning, Data Warehouse & Data Mining.
- **GPA:** 3.64/4.0 **Average Score:** 86.73/100 **Ranking:** 27/108

## **PUBLICATIONS**

#### 1 published paper, 1 accepted paper, 1 under review paper

- [1] **Zhou Z**, Zhou X, Lu Y, et al. Multi-Source Data-Driven Route Prediction for Instant Delivery. 2021 17th International Conference on Mobility, Sensing and Networking (MSN). IEEE, 2021. (CCF C) Get paper
- [2] **Zhou Z**, Zhou X, Guo B, et al. Multi-sensor Data-driven Route Prediction in Instant Delivery with a 3-Conversion Network. (ACM Transactions on Sensor Networks (TOSN), In Press)
- [3] **Zhou Z**, Lin L, Wang H, et al. A Cross Domain Method for Customer Lifetime Value Prediction in Supply Chain Platform. (Submitted to WWW 2024)

## RESEARCH EXPERIENCE

# **Intelligence Internet of Things Lab**

Nanjing, China

Mentored by: Tian He and Shuai Wang

2021.09 - Present

Research on Multi-source Data-driven Route Prediction for Instant Delivery

- Investigated the problem of route prediction in instant delivery, which is a challenging issue due to the unique characteristics in the scenario, such as strict deadlines, overlapped delivery time of multiple orders, and diverse individual preferences on delivery routes.
- Proposed a model integrating **multi-source heterogeneous data** information to improve the accuracy of route prediction in instant delivery.
- Designed an improved **graph neural network** to encode the global information considered by the couriers in decision-making and model the complicated decision-making mode of the couriers in the multi-order scene.
- Experimental results on real-word data showed that our model outperforms other state-of-the-art baselines and offers up to 85.51% of the route prediction precision.

#### **INDUSTRY EXPERIENCE**

# Algorithm Internship, Technology and Data Intelligence Division in JD Logistics

Beijing, China

2022.07 - 2023.01

Participated in the project "User Recommendation based on Knowledge Graph" and undertook the following
works: Analyzed user data to explore data distribution, mined key factors affecting user sign-ups, and
performed feature engineering to enrich knowledge graphs. Designed experiments to evaluate the effect of user
recommendation models.

# **Development Internship, China Communications Services Corporation Limited**

Nanjing, China

2020.08 - 2021.02

• Participated in the front-end and back-end development of the project "Manpower Assistant WeChat App". Investigated the related technologies of research projects such as "Text Content-based Spam Identification".

## **ACTIVITIES**

•	Teaching Assistance, Principle of Database Systems, Southeast University	2021.09 - 2021.12
•	Outstanding Volunteer, Cyrus Tang Love Society, Southeast University	2017.10 - 2021.06

## **HONORS & AWARDS**

•	First-class Academic Scholarship The Second Prize in the Eighth Jiangsu "Internet+" Student Innovation and Entrepreneurship Competition	Southeast University Jiangsu Education Department, China	2022.10 2022.08
•	Merit Postgraduate	Southeast University	2022.06
•	Merit Student	Southeast University	2019.10
•	Course Scholarship	Southeast University	2018.06

# **SKILLS & INTERESTS**

- Language Skills: Chinese (native), English (fluent)
- Computer Skills: Python, PyTorch, C/C++, Java, Microsoft Office Tools, LaTeX
- Interests: Traveling, Photography, Reading