Chuang Yang

WORKING EXPERIENCE

LocationMind Inc. Apr. 2020 – Present

Research Intern (Part time)

Tokyo, Japan

- Designed a fine-grained epidemic model to simulate the propagation dynamics in the Greater Tokyo Area.
- Integrated Stop Points Detection&Time Interpolation functions into HMM Map Matching Algorithm in Java.
- Joined xPop team and in charge of infrastructure operation and maintenance.

SouthIntelligence Tech. Co. Ltd.

Jul. 2018 - Oct. 2018

Software Engineering Intern (Full time), supervised by Dr. Yilun Cai

Shenzhen, China

- Participated in building an elasticsearch-based macro policy search engine.
 - * Designed and developed a mini web app for the interactive exploration of elasticsearch scoring function.
 - * Developed part of search engine queries.
 - * Built a Python script for deployment in production environment.
 - * Developed the background master control program (MCP) in Python.

Database Group@SUSTech

Oct. 2017 - Jul. 2019

Undergraduate research assistant (Part time), supervised by Prof. Bo Tang

Shenzhen, China

- Teacher Assistant for CS302 Operating System, Spring 2019, CSE@SUSTech
- Proposed a data visualization system, named Vaite.
 - * Published at IEEE ICDE 2019 in first author.
 - * A visualized assisted exploration system to help users discover useful insights from big trajectories.
 - * Oriented towards users without experience or knowledge on issuing their analysis tasks by SQL like queries.
 - * Driven by Apache Spark, thus supports near real time response.

PUBLICATIONS in DATA VISUALIZATION

- Chuang Yang, Zhiwen Zhang, Zipei Fan, Renhe Jiang, Quanjun Chen, Xuan Song, Ryosuke Shibasaki. EpiMob: Interactive Visual Analytics of Citywide Human Mobility Restrictions for Epidemic Control. arXiv preprint arXiv:2007.03180v2, Jan. 2021. [pdf] [demo video]
- **Chuang Yang**, Renhe Jiang, Ryosuke Shibasaki. MaaS System Visualization. *Big Data and Mobility as a Service 9, 245-263, Elsevier*, To Appear, 2021.
- Zipei Fan, **Chuang Yang**, Zhiwen Zhang, Xuan Song, Yinghao Liu, Renhe Jiang, Quanjun Chen, Ryosuke Shibasaki. Human Mobility based Individual-level Epidemic Simulation Platform (Extended News Letter). *ACM Transactions on Spatial Algorithms and Systems (TSAS)*, To Appear, 2021.
- Chuang Yang, Yilan Zhang, Bo Tang, Min Zhu. Vaite: a Visualization-assisted Interactive Big Urban Trajectory Data Exploration System. Proc. of the 35th IEEE International Conference on Data Engineering (ICDE), Macau, China, Apr. 2019.[pdf]

EDUCATION

Center for Spatial Information Science, The University of Tokyo

Sept. 2020 – Sept. 2022 (Expected) Kashiwa, Japan

M.S. degree in Socio-Cultural Environmental Studies Supervised by Prof. Ryosuke Shibasaki and Prof. Renhe Jiang

Center for Spatial Information Science, The University of Tokyo

Oct. 2019 – Aug. 2020

Research Student

Kashiwa, Japan

Supervised by Prof. Ryosuke Shibasaki and Prof. Renhe Jiang

Southern University of Science and Technology

Sept. 2015 – Jun. 2019 Shenzhen, China

B.S. degree in Computer Science

COMMUNITY SERVICES

- Program Committee Member for ECML/PKDD 2021
- Reviewer for IEEE TITS 2021
- Subreviewer for ACM SIGSPATIAL 2021

SKILLS

- Languages: Python, JavaScript(ReactJS, JQuery), HTML/CSS, SQL, Java, Scala
- Data Visualization Tools: Leaflet.js, Deck.GL, Recharts, Material-UI, D3.js
- Big Data Processing Tools: Apache Spark SQL
- Data Exploration Tools: Lux
- Development Framework: Django (Python), Flask-RESTful (Python), Play (Scala)
- Others: Elasticsearch, Linux Commands