# Transport Data Science Research Center of Tongji University

## **Global Talents Recruitment**

In order to copy with the challenges of rapid urbanization and motorization in China, seize the historical opportunity of big data science, based on the strength of transportation discipline, gathering interdisciplinary research resources, Transport Data Science Research Center (TDSRC) of Tongji University has been established. TDSRC is a research laboratory built on the leading transport discipline of Tongji University, in partnership with some world-class universities, government departments and information technology companies. It aims to integrate the traditional transport theory with the latest achievements of data science, promote the revolution of transport theory, develop new knowledge, technologies and approaches for transport big data and computational intelligence, cultivate transport data analysts, support the development of transport data industry and strive to become a world-class transport data science research institution.

TDSRC has organized interdisciplinary research groups of computer science, urban planning, GIS and transport engineering, etc. Furthermore, TDSRC is equipped with advanced facilities. Transport big data experiment platform is building for research, development and teaching. Based on the resources of Information Center of Tongji University, this experiment platform consists of high-performance computing clusters (64 compute nodes), mass storage units (10 petabytes) and visualization system. Over 200 terabytes transport data have been imported in the experiment platform. The data include mobile phone data, GPS data of Taxi and bus, GPS data derived from smartphones, vehicle license plate recognition data, smart card data of bus and metro, induction loop data, etc., covering Shanghai, Beijing, Shenzhen, Xiamen and other dozens of large cities of China. The experiment platform can also access the computing and data resources of our partner companies such as Cennavi, Navinfo.

TDSRC has been experiencing the rapid development of Shanghai metropolis, provided strong supports to the construction of Shanghai Urban Transport Integrated Information System and the traffic management and information service of Shanghai World Expo. TDSRC firstly proposed "the urban transport planning theory and methods under continuous information environment" in China, and developed the first urban transport simulation system of China in Shenzhen, which supported the transport planning and management of Shenzhen Universiade and has been applied to Hangzhou and other cities. TDSRC firstly proposed the training program of "transport data analysis engineer" in China, and has cultivated more than 20 PhD & master graduates. TDSRC has completed 4 monographs and over 60 SCI/EI indexed papers in the field of transport big data.

TDSRC has established cooperative relationships with Washington University, Purdue University, Shanghai Traffic Information Center, Shanghai Transport & Port Research Center, Tencent, etc. We are going to recruit 6 to 10 faculties in the next few years. Welcome to join TDSRC.

Positions	Number	Qualifications & Requirements	Remuneration & Supports
Executive Director	1	<ol> <li>Age: Under 50 years old</li> <li>Renowned associate professor and above from abroad</li> <li>Major in transport data science or related disciplines</li> <li>Full-time contract</li> </ol>	<ol> <li>Professor, PhD &amp; master supervisor</li> <li>Annual Salary equal to the similar position abroad</li> <li>Research activation fee</li> </ol>
National Youth 1000 Talents Program	2-3	<ol> <li>Age: Under 40 years old</li> <li>PhD, more than 3 years working abroad in well-known universities, research institutions or research &amp; development institutes of well- known companies</li> <li>Special admission for outstanding PhD graduates</li> <li>Major in transport data analysis or traffic simulation</li> <li>Full-time contract</li> </ol>	<ol> <li>Remuneration of national youth 1000 talents program (¥1-3 million of research funding, ¥0.5 million one-off allowance)</li> <li>Professor, PhD &amp; master supervisor</li> <li>Annual Salary: ¥0.4 million</li> <li>Research fund (equal to national research funding)</li> </ol>
Assistant Research Fellow	2-3	<ol> <li>Age: Under 35 years old</li> <li>PhD from well-known universities abroad</li> <li>Major in statistics, data science or data visualization</li> <li>Or major in transport data analysis or traffic simulation</li> <li>Full-time contract</li> </ol>	<ol> <li>Annual Salary: ¥0.15-0.2 million (Pre-tax)</li> <li>Housing allowance (tax- free) and apartment</li> <li>Research activation fee</li> </ol>
Postdoc Fellow	2-3	<ol> <li>Age: Under 35 years old</li> <li>PhD from well-known universities abroad</li> <li>Major in statistics, data science or data visualization</li> <li>Or major in transport data analysis or traffic simulation</li> <li>Full-time contract</li> </ol>	<ol> <li>Annual Salary: ¥0.18 million (Pre-tax)</li> <li>Research activation fee</li> </ol>

### **Recruitment Positions**

#### • How to apply

Application materials include: ①Declared candidate summary; ②The applicant Declaration c Annex about overseas talents summary table.

(1) Three recommendation letters from foreign experts; (2) Copy of education certificates and diplomas; (3) Copy of ID card or passport; (4) Certification of working abroad; (5) Copy or certification of major academic achievements (representative papers and works, patents and product); (6) Certification of research projects participated; (7) Certification of rewards.

National Youth 1000 Talents Program: http://www.1000plan.org, or http://hr.tongji.edu.cn

#### • Contact information

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