

# ZHAO, ZHAN

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CONTACT INFORMATION	Rm 809, 8/F, Knowles Building The University of Hong Kong Pokfulam Road, Hong Kong	Tel: (852) 3917 6171 Mobile: (852) 9512 0322 Email: zhanzhao@hku.hk
RESEARCH INTERESTS	<ul style="list-style-type: none"><li>• Urban Computing and Spatiotemporal Data Mining</li><li>• Human Mobility and Travel Behavior</li><li>• Public Transit and Shared Mobility on Demand Systems</li></ul>	
EDUCATION	<b>Massachusetts Institute of Technology</b> , Cambridge, MA, USA Ph.D. Transportation, July 2018 Department of Civil and Environmental Engineering Thesis: <i>“Uncovering Individual Mobility Patterns from Transit Smart Card Data: Trip Prediction, Activity Inference, and Change Detection”</i> Committee: Jinhua Zhao, Haris Koutsopoulos, Nigel Wilson, Tamara Broderick  <b>University of British Columbia</b> , Vancouver, BC, Canada M.S. Civil Engineering, August 2013 Department of Civil Engineering Thesis: <i>“Understanding Car Pride”</i>  <b>Tongji University</b> , Shanghai, China B.E. Transportation Engineering, July 2011 College of Transportation Engineering	
ACADEMIC EXPERIENCE	<b>University of Hong Kong</b> , Hong Kong, China Assistant Professor Department of Urban Planning & Design Faculty of Architecture	07/2020-Present
	<b>SMART</b> , Singapore, Singapore Visiting Researcher	06/2017-08/2017
	<b>Massachusetts Institute of Technology</b> , Cambridge, MA, USA Graduate Research Assistant	01/2014-07/2018
	<b>University of British Columbia</b> , Vancouver, BC, Canada Graduate Research Assistant	09/2011-08/2013
INDUSTRY EXPERIENCE	<b>Via Transportation, Inc.</b> , New York, NY, USA Senior Data Scientist	08/2018-06/2020
	<b>IBM Research</b> , Dublin, Ireland Research Intern	06/2016-09/2016
	<b>Transport for London</b> , London, UK Research Intern	06/2015-08/2015
	<b>Translink</b> , Vancouver, BC, Canada Research Intern	09/2012-11/2012

TEACHING  
AND ADVISING  
EXPERIENCE

Massachusetts Institute of Technology, Cambridge, MA, USA

Teaching Assistant

- 11.478 *Behavior and Policy*, Spring 2015

Student Advisor

- Baichuan Mo, summer research project, Summer 2018
- Margo Dawes, undergraduate Capstone project, Spring 2015

University of British Columbia, Vancouver, BC, Canada

Teaching Assistant

- CIVL 441 *Transportation Planning and Analysis*, Spring 2013
- CIVL 587 *Urban Transportation Economics and Policy*, Fall 2012

JOURNAL  
PUBLICATIONS

- **Zhao, Z.**, Koutsopoulos, H. N., and Zhao, J. (2020). Discovering latent activity patterns from transit smart card data: A spatiotemporal topic model. *Transportation Research Part C: Emerging Technologies*, 116, 102627.
- **Zhao, Z.**, Koutsopoulos, H. N., and Zhao, J. (2018). Detecting pattern changes in individual travel behavior: A Bayesian approach. *Transportation Research Part B: Methodological*, 112, 73-88.
- **Zhao, Z.**, Koutsopoulos, H. N., and Zhao, J. (2018). Individual mobility prediction using transit smart card data. *Transportation Research Part C: Emerging Technologies*, 89, 19-34.
- Goulet-Langlois, G., Koutsopoulos, H. N., **Zhao, Z.**, and Zhao, J. (2018). Measuring regularity of individual travel patterns. *IEEE Transactions on Intelligent Transportation Systems*, 19(5), 1583-1592.
- **Zhao, Z.**, and Zhao, J. (2018). Car pride and its behavioral implication: An exploration in Shanghai. *Transportation*, 1-10.
- Zhao, J., Frumin, M., Wilson, N. H., and **Zhao, Z.** (2013). Unified estimator for excess journey time under heterogeneous passenger incidence behavior using smartcard data. *Transportation Research Part C: Emerging Technologies*, 34, 70-88.
- Frumin, M., Zhao, J., Wilson, N. H., and **Zhao, Z.** (2013). Automatic data for applied railway management: Case study on the London Overground. *Transportation Research Record: Journal of the Transportation Research Board*, 2353, 47-56.
- **Zhao, Z.**, Zhao, J., and Shen, Q. (2013). Has transportation demand of Shanghai, China, passed its peak growth? *Transportation Research Record: Journal of the Transportation Research Board*, 2394, 85-92.

CONFERENCE  
PAPERS

- **Zhao, Z.**, Koutsopoulos, H. N., and Zhao, J. (2018). Discovering latent activity patterns from human mobility. *The 7th ACM SIGKDD International Workshop on Urban Computing (UrbComp'18)*, London, UK.
- **Zhao, Z.**, Koutsopoulos, H. N., and Zhao, J. (2018). Detecting changes in individual travel behavior patterns. *Transportation Research Board 97th Annual Meeting*, Washington, DC.
- **Zhao, Z.**, Koutsopoulos, H. N., and Zhao, J. (2017). Mobility as a language: Predicting individual mobility in public transportation using n-gram models. *Transportation Research Board 96th Annual Meeting*, Washington, DC.
- **Zhao, Z.**, Zhao, J., and Koutsopoulos, H. N. (2016). Individual-level trip detection using sparse call detail record data based on supervised statistical learning. *Transportation Research Board 95th Annual Meeting*, Washington, DC.
- **Zhao, Z.**, and Zhao, J. (2015). Car pride: Psychological structure and behavioral implications. *Transportation Research Board 94th Annual Meeting*, Washington, DC.

- **Zhao, Z.**, Chua G., and Zhao, J. (2012). Evolution of trip chaining patterns in London from 1991 to 2010. *Innovations in Travel Modelling Conference*, Tampa, FL.

#### BOOK CHAPTERS

- **Zhao, Z.**, Koutsopoulos, H. N., and Zhao, J. (2019). Uncovering Spatiotemporal Structures from Transit Smart Card Data for Individual Mobility Modeling. Book chapter for *Demand for Emerging Transportation Systems*, 123-149.

#### HONORS AND AWARDS

- Fellow, Meeting of Minds@HKU Forum for Outstanding Young Scholars, 2019
- Mitacs-Accelerate Internship Award, 2012
- Tongji University Outstanding Graduate Award, 2011
- Second Prize, Competition of Transport Science and Technology of Tongji University, 2010
- Scholarships for Excellent Academic Performance, 2008-2010

#### SERVICE

Ad-hoc reviewer for *Transportation Research Part C: Emerging Technologies*, *Transportation Research Part A: Policy and Practice*, *IEEE Transactions on Intelligent Transportation Systems*, and *Transportation Research Board Annual Meetings*.