

# Zhen Sean Qian

## List of Publications by Year in descending order

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Version: 2024-02-01

76  
papers

3,263  
citations

186209

28  
h-index

155592

55  
g-index

76  
all docs

76  
docs citations

76  
times ranked

2635  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effectiveness of incentives on electric vehicle adoption in Norway. <i>Transportation Research, Part D: Transport and Environment</i> , 2016, 46, 56-68.	3.2	334
2	From Twitter to detector: Real-time traffic incident detection using social media data. <i>Transportation Research Part C: Emerging Technologies</i> , 2016, 67, 321-342.	3.9	263
3	A mixed traffic capacity analysis and lane management model for connected automated vehicles: A Markov chain method. <i>Transportation Research Part B: Methodological</i> , 2017, 106, 266-292.	2.8	257
4	Optimized Graph Convolution Recurrent Neural Network for Traffic Prediction. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2021, 22, 1138-1149.	4.7	174
5	Investigating driver injury severity patterns in rollover crashes using support vector machine models. <i>Accident Analysis and Prevention</i> , 2016, 90, 128-139.	3.0	166
6	A deep learning approach to real-time parking occupancy prediction in transportation networks incorporating multiple spatio-temporal data sources. <i>Transportation Research Part C: Emerging Technologies</i> , 2019, 107, 248-265.	3.9	134
7	Managing bottleneck congestion with tradable credits. <i>Transportation Research Part B: Methodological</i> , 2013, 56, 1-14.	2.8	128
8	Managing morning commute traffic with parking. <i>Transportation Research Part B: Methodological</i> , 2012, 46, 894-916.	2.8	113
9	Optimal dynamic parking pricing for morning commute considering expected cruising time. <i>Transportation Research Part C: Emerging Technologies</i> , 2014, 48, 468-490.	3.9	108
10	Optimal Deployment of Alternative Fueling Stations on Transportation Networks Considering Deviation Paths. <i>Networks and Spatial Economics</i> , 2015, 15, 183-204.	0.7	79
11	The impact of car specifications, prices and incentives for battery electric vehicles in Norway: Choices of heterogeneous consumers. <i>Transportation Research Part C: Emerging Technologies</i> , 2016, 69, 386-401.	3.9	78
12	Modeling heterogeneous traffic flow: A pragmatic approach. <i>Transportation Research Part B: Methodological</i> , 2017, 99, 183-204.	2.8	73
13	Modeling multi-modal morning commute in a one-to-one corridor network. <i>Transportation Research Part C: Emerging Technologies</i> , 2011, 19, 254-269.	3.9	71
14	Investigation of driver injury severities in rural single-vehicle crashes under rain conditions using mixed logit and latent class models. <i>Accident Analysis and Prevention</i> , 2019, 124, 219-229.	3.0	71
15	Dynamic Graph Convolution Network for Traffic Forecasting Based on Latent Network of Laplace Matrix Estimation. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2022, 23, 1009-1018.	4.7	69
16	Examining driver injury severity in intersection-related crashes using cluster analysis and hierarchical Bayesian models. <i>Accident Analysis and Prevention</i> , 2018, 120, 139-151.	3.0	67
17	Optimal occupancy-driven parking pricing under demand uncertainties and traveler heterogeneity: A stochastic control approach. <i>Transportation Research Part B: Methodological</i> , 2014, 67, 144-165.	2.8	65
18	The Morning Commute Problem with Coarse Toll and Nonidentical Commuters. <i>Networks and Spatial Economics</i> , 2011, 11, 343-369.	0.7	64

#	ARTICLE	IF	CITATIONS
19	A novel work zone short-term vehicle-type specific traffic speed prediction model through the hybrid EMD-ARIMA framework. <i>Transportmetrica B</i> , 2016, 4, 159-186.	1.4	61
20	Socioeconomic and usage characteristics of transportation network company (TNC) riders. <i>Transportation</i> , 2020, 47, 3047-3067.	2.1	56
21	System-optimal dynamic traffic assignment with and without queue spillback: Its path-based formulation and solution via approximate path marginal cost. <i>Transportation Research Part B: Methodological</i> , 2012, 46, 874-893.	2.8	52
22	Predicting real-time surge pricing of ride-sourcing companies. <i>Transportation Research Part C: Emerging Technologies</i> , 2019, 107, 444-462.	3.9	40
23	Understanding and Predicting Travel Time with Spatio-Temporal Features of Network Traffic Flow, Weather and Incidents. <i>IEEE Intelligent Transportation Systems Magazine</i> , 2019, 11, 12-28.	2.6	37
24	Estimating multi-year origin-destination demand using high-granular multi-source traffic data. <i>Transportation Research Part C: Emerging Technologies</i> , 2018, 96, 96-121.	3.9	35
25	From Twitter to traffic predictor: Next-day morning traffic prediction using social media data. <i>Transportation Research Part C: Emerging Technologies</i> , 2021, 124, 102938.	3.9	35
26	Modelling network flow with and without link interactions: the cases of point queue, spatial queue and cell transmission model. <i>Transportmetrica B</i> , 2013, 1, 33-51.	1.4	32
27	Turning meter transactions data into occupancy and payment behavioral information for on-street parking. <i>Transportation Research Part C: Emerging Technologies</i> , 2017, 78, 165-182.	3.9	32
28	Optimal Parking Pricing in General Networks with Provision of Occupancy Information. <i>Procedia, Social and Behavioral Sciences</i> , 2013, 80, 779-805.	0.5	31
29	Statistical inference of probabilistic origin-destination demand using day-to-day traffic data. <i>Transportation Research Part C: Emerging Technologies</i> , 2018, 88, 227-256.	3.9	31
30	Are travelers substituting between transportation network companies (TNC) and public buses? A case study in Pittsburgh. <i>Transportation</i> , 2021, 48, 977-1005.	2.1	30
31	Optimal dynamic pricing for morning commute parking. <i>Transportmetrica A: Transport Science</i> , 2015, 11, 291-316.	1.3	29
32	A general formulation for multi-modal dynamic traffic assignment considering multi-class vehicles, public transit and parking. <i>Transportation Research Part C: Emerging Technologies</i> , 2019, 104, 369-389.	3.9	29
33	Estimating multi-class dynamic origin-destination demand through a forward-backward algorithm on computational graphs. <i>Transportation Research Part C: Emerging Technologies</i> , 2020, 119, 102747.	3.9	29
34	Empirical Mode Decomposition-Autoregressive Integrated Moving Average. <i>Transportation Research Record</i> , 2014, 2460, 66-76.	1.0	28
35	A Hybrid Route Choice Model for Dynamic Traffic Assignment. <i>Networks and Spatial Economics</i> , 2013, 13, 183-203.	0.7	25
36	The morning commute problem with heterogeneous travellers: the case of continuously distributed parameters. <i>Transportmetrica A: Transport Science</i> , 2013, 9, 178-203.	1.3	25

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37	The economics of parking provision for the morning commute. <i>Transportation Research, Part A: Policy and Practice</i> , 2011, 45, 861-879.	2.0	23
38	A Low Rank Dynamic Mode Decomposition Model for Short-Term Traffic Flow Prediction. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2021, 22, 6547-6560.	4.7	22
39	On the variance of recurrent traffic flow for statistical traffic assignment. <i>Transportation Research Part C: Emerging Technologies</i> , 2017, 81, 57-82.	3.9	21
40	Understanding Transit System Performance Using AVL-APC Data: An Analytics Platform with Case Studies for the Pittsburgh Region. <i>Journal of Public Transportation</i> , 2018, 21, 19-40.	0.3	20
41	Where is My Parking Spot?. <i>Transportation Research Record</i> , 2015, 2489, 77-85.	1.0	19
42	A stochastic optimal control approach for real-time traffic routing considering demand uncertainties and travelers's choice heterogeneity. <i>Transportation Research Part B: Methodological</i> , 2017, 104, 710-732.	2.8	17
43	Estimating Time-Dependent Freeway Origin-Destination Demands with Different Data Coverage. <i>Transportation Research Record</i> , 2008, 2047, 91-99.	1.0	16
44	High-Resolution Traffic Sensing with Probe Autonomous Vehicles: A Data-Driven Approach. <i>Sensors</i> , 2021, 21, 464.	2.1	15
45	User-centric interdependent urban systems: Using time-of-day electricity usage data to predict morning roadway congestion. <i>Transportation Research Part C: Emerging Technologies</i> , 2018, 92, 392-411.	3.9	14
46	Computing Individual Path Marginal Cost in Networks with Queue Spillbacks. <i>Transportation Research Record</i> , 2011, 2263, 9-18.	1.0	13
47	Improving the performance of first- and last-mile mobility services through transit coordination, real-time demand prediction, advanced reservations, and trip prioritization. <i>Transportation Research Part C: Emerging Technologies</i> , 2021, 133, 103430.	3.9	12
48	Traffic State Estimation for Urban Road Networks Using a Link Queue Model. <i>Transportation Research Record</i> , 2017, 2623, 29-39.	1.0	11
49	Detecting Pickpocketing Gangs on Buses with Smart Card Data. <i>IEEE Intelligent Transportation Systems Magazine</i> , 2019, 11, 181-199.	2.6	11
50	Interactive Visual Exploration of Human Mobility Correlation Based on Smart Card Data. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2021, 22, 4825-4837.	4.7	11
51	The economics of parking provision for the morning commute. <i>Procedia, Social and Behavioral Sciences</i> , 2011, 17, 612-633.	0.5	7
52	Full Closure or Partial Closure? Evaluation of Construction Plans for the I-5 Closure in Downtown Sacramento. <i>Journal of Transportation Engineering</i> , 2013, 139, 273-286.	0.9	7
53	Learning to Recommend Signal Plans under Incidents with Real-Time Traffic Prediction. <i>Transportation Research Record</i> , 2020, 2674, 45-59.	1.0	7
54	Path-based system optimal dynamic traffic assignment: A subgradient approach. <i>Transportation Research Part B: Methodological</i> , 2020, 134, 41-63.	2.8	7

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55	Managing traffic with raffles. <i>Transportation Research Part C: Emerging Technologies</i> , 2019, 107, 490-509.	3.9	6
56	Measuring and reducing the disequilibrium levels of dynamic networks with ride-sourcing vehicle data. <i>Transportation Research Part C: Emerging Technologies</i> , 2020, 110, 222-246.	3.9	6
57	A Generalized Single-Level Formulation for Origin-Destination Estimation under Stochastic User Equilibrium. <i>Transportation Research Record</i> , 2018, 2672, 58-68.	1.0	5
58	An Optimized Temporal-Spatial Gated Graph Convolution Network for Traffic Forecasting. <i>IEEE Intelligent Transportation Systems Magazine</i> , 2022, 14, 153-162.	2.6	5
59	Development of a Freight Demand Model with an Application to California. <i>International Journal of Transportation Science and Technology</i> , 2014, 3, 19-38.	2.0	4
60	Parking Sensing and Information System: Sensors, Deployment, and Evaluation. <i>Transportation Research Record</i> , 2016, 2559, 81-89.	1.0	4
61	Multi-source traffic data reconstruction using joint low-rank and fundamental diagram constraints. <i>IEEE Intelligent Transportation Systems Magazine</i> , 2019, 11, 221-234.	2.6	4
62	A general formulation for multi-modal dynamic traffic assignment considering multi-class vehicles, public transit and parking. <i>Transportation Research Procedia</i> , 2019, 38, 914-934.	0.8	4
63	What Happens When a Major Freeway is Closed for Repair?. <i>Transportation Research Record</i> , 2012, 2278, 134-144.	1.0	3
64	Modeling Relation Proximity of Passengers Using Public Transit Smart Card Data. <i>IEEE Intelligent Transportation Systems Magazine</i> , 2020, , 0-0.	2.6	3
65	Inferring the causal effect of work zones on crashes: Methodology and a case study. <i>Analytic Methods in Accident Research</i> , 2022, 33, 100203.	4.7	3
66	An Unsupervised Learning Approach for Analyzing Traffic Impacts under Arterial Road Closures: Case Study of East Liberty in Pittsburgh. <i>Journal of Transportation Engineering</i> , 2016, 142, .	0.9	2
67	Effect of Fare Policies on Dwell Time. <i>Transportation Research Record</i> , 2017, 2649, 20-27.	1.0	2
68	Towards an Occupancy-Enhanced Building HVAC Control Strategy Using Wi-Fi Probe Request Information. , 2017, , .		2
69	Understanding Human Perception of Bus Fullness: An Empirical Study of Crowdsourced Fullness Ratings and Automatic Passenger Count Data. <i>Transportation Research Record</i> , 2018, 2672, 475-484.	1.0	2
70	Optimal stochastic control for parking systems: occupancy-driven parking pricing. , 2013, , .		1
71	Emerging Mobility Systems [Guest Editorial]. <i>IEEE Intelligent Transportation Systems Magazine</i> , 2019, 11, 8-11.	2.6	1
72	Improving Short-Term Travel Speed Prediction with High-Resolution Spatial and Temporal Rainfall Data. <i>Journal of Transportation Engineering Part A: Systems</i> , 2021, 147, 04021004.	0.8	1

#	ARTICLE	IF	CITATIONS
73	Optimizing first- and last-mile public transit services leveraging transportation network companies (TNC). Transportation, 0, , .	2.1	1
74	Societal Impacts of a Complete Street Project in a Mixed Urban Corridor: Case Study in Pittsburgh. Journal of Infrastructure Systems, 2021, 27, 05021003.	1.0	0
75	A Novel Map-Matching Algorithm for Relating Work Zones and Crashes. , 2022, , .		0
76	Identifying Temporal Instability in Factors Causing Work Zone Crash Occurrences Using Fast Causal Inference. , 2022, , .		0