#	Title	Keywords			
Metho	Methods, techniques				
1	Delineating urban functional areas with building-level social media data: A dynamic time warping (DTW) distance-based k-medoids method	Time-series data analysis, similarity measures, DTW			
2	Mining event periodicity from incomplete observations	Time-series data analysis, autocorrelation, Fourier transform,			
3	Modeling Temporal-Spatial Correlations for Crime Prediction	Time-series, Spatial data, spatial autocorrelation, temporal autocorrelation, spatial weights			
4	Analyzing and predicting the spatial penetration of Airbnb in U.S. cities	Spatial data analysis, spatial auto- correlation			
5	Measuring Ambient Population from Location-Based Social Networks to Describe Urban Crime	Spatial data analysis, Spatial lag model, spatial weights			
6	Use and validation of location-based services in urban research: An example with Dutch restaurants	Spatial data analysis			
7	Incorporating spatial autocorrelation and settlement type segregation to improve the performance of an urban growth model	Spatial data analysis, spatial auto- correlation			
8	Spatial autocorrelation and the selection of simultaneous autoregressive models	Spatial autocorrelation, spatial neighborhood			
9	Segmenting human trajectory data by movement states while addressing signal loss and signal noise	Spatio-temporal data analysis, Trajectory segmentation			
10	Cooperative Parallel Particle Filters for online model	Spatio-temporal data analysis, Particle filters, state-space models			

	selection and applications to Urban Mobility	
11	A trajectory clustering method based on Douglas-Peucker compression and T density for marine traffic pattern recognition	Spatio-temporal data analysis, trajectory clustering, trajectory segmentation, Douglas-Peuker
12	Understanding the tourist mobility using GPS: Where is the next place?	Spatio-temporal data analysis, trajectory clustering
13	Towards the Use of Neural Networks for Influenza Prediction at Multiple Spatial Resolutions	Spatio-temporal data analysis, autoregressive models, neural networks, epidemic modeling
14	Short-Term Prediction of Passenger Demand in Multi-Zone Level: Temporal Convolutional Neural Network With Multi- Task Learning	Machine learning for Spatio-temporal data, similarity measures, DTW, neural networks
15	Fused Matrix Factorization with Geographical and Social Influence in Location-Based Social Networks	Machine learning for spatio-temporal data, Matrix factorization, LBSN
16	GeoMF: Joint Geographical Modeling and Matrix Factorization	Machine learning for spatio-temporal data, Matrix factorization, LBSN
17	Discovering Fine-Grained Spatial Pattern From Taxi Trips: Where Point Process Meets Matrix Decomposition and Factorization	Machine learning for spatio-temporal data, Matrix factorization, LBSN, spatial data analysis, point processes
18	GeoSoCa: Exploiting geographical, social and categorical correlations for point-of-interest recommendations	Machine learning for spatio-temporal data, LBSN
19	Joint Modeling of Dense and Incomplete Trajectories for Citywide Traffic Volume Inference	Machine learning, spatio-temporal trajectory data, representation learning
20	CityTransfer: Transferring Inter- and Intra-City Knowledge for Chain Store Site Recommendation based on Multi-Source Urban Data	Machine learning for spatio-temporal data, transfer learning, neural networks
21	Data-Driven Travel Time Prediction from Latent Structures using Multiple Data Sources	Machine learning, fusing data sources, matrix factorization

22	Regions, Periods, Activities: Uncovering Urban Dynamics via Cross-Modal Representation Learning	Machine learning, neural networks, representation learning
23	Region Representation Learning via Mobility Flow	Machine learning, neural networks, representation learning
24	Learning Embeddings of Intersections on Road Networks	Machine learning, neural networks, representation learning
25	Revisiting Spatial-Temporal Similarity: A Deep Learning Framework for Traffic Prediction	Machine learning, neural networks
26	Revisiting Convolutional Neural Networks for Citywide Crowd Flow Analytics	Machine learning, neural networks, crowd flow data, spatio-temporal data
27	AutoST: Efficient Neural Architecture Search for Spatio- Temporal Prediction	Machine learning, neural networks, spatio-temporal data, automated machine learning (possibly interesting for people following the AutoML course)
28	Deep Spatio-Temporal Residual Networks for Citywide Crowd Flows Prediction	Machine learning, neural networks
29	Hierarchically Structured Transformer Networks for Fine- Grained Spatial Event Forecasting	Machine learning, neural networks, representation learning
Urban	analytics, new societal applications, new data sources	
30	Transfer Learning from Deep Features for Remote Sensing and Poverty Mapping	Poverty maps, remote sensing data, open data
31	An Intelligent Tree Planning Approach Using Location- based Social Networks Data	Network analysis, LBSNs, Foursquare
32	Understanding the Effects of the Neighbourhood Built Environment on Public Health with Open Data	Public Health with Open Data

33	ADAPT-Pricing: A Dynamic And Predictive Technique for Pricing to Maximize Revenue in Ridesharing Platforms	Optimization application on New York taxi data
34	The dark side of the Earth: benchmarking lighting access for all cities on Earth and the CityNet dataset (Integrating open- source remote-sensing data products on the urban environment	Remote sensing data, open data
35	Predicting Traffic Accidents Through Heterogeneous Urban Data: A Case Study	Multiple data sources, open data
36	Detecting Urban Anomalies Using Multiple Spatio-Temporal Data Sources	Multiple data sources, open data
37	Predicting the Spatio-Temporal Evolution of Chronic Diseases in Population with Human Mobility Data	Foursquare LBSN + open data
38	Dynamic macro scale traffic flow optimisation using crowd- sourced urban movement data	Foursquare LBSN + open data
39	BigEarthNet Dataset with A New Class-Nomenclature for Remote Sensing Image Understanding	Remote sensing data, Open data source, transfer learning, machine learning, neural networks (<i>a useful benchmark dataset for</i> <i>testing your urban application ideas</i>)
40	The determinants of the differential exposure to COVID-19 in New York City and their evolution over time	New data sources, Covid-19, exploratory analysis
41	Were Urban Cowboys Enough to Control COVID-19? Local Shelter-In-Place Orders and Coronavirus Case Growth	New data sources, Cell-phone data, Covid-19 policy data
42	Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe	New data sources, Open data sources, Covid-19

Additionally, you can select accepted papers from previously accepted papers of Urban Computing workshops http://urban.cs.wpi.edu/urbcomp2020/pass.html and bid for them. If you are interested in any other papers, we can discuss them as well.