

References

- [1] Constantinos S Papacostas. Fundamentals of transportation engineering. 1987.
- [2] Marcos R Vieira, Enrique Frías-Martínez, Petko Bakalov, Vanessa Frías-Martínez, and Vassilis J Tsotras. Querying spatio-temporal patterns in mobile phone-call databases. In *2010 Eleventh International Conference on Mobile Data Management*, pages 239–248. IEEE, 2010.
- [3] Md Shahadat Iqbal, Charisma F Choudhury, Pu Wang, and Marta C González. Development of origin–destination matrices using mobile phone call data. *Transportation Research Part C: Emerging Technologies*, 40:63–74, 2014.
- [4] Margus Tiru. Overview of the sources and challenges of mobile positioning data for statistics. In *International Conference on Big Data for Official Statistics. United Nations Statistics Division (UNSD) and National Bureau of Statistics of China*, pages 28–30, 2014.
- [5] Michael Meyer and Eric J Miller. Urban transport plan, 2000.
- [6] Paul H Wright and Norman J Ashford. *Transportation engineering: planning and design*. 1989.
- [7] Mark A Beyer and Douglas Laney. The importance of ‘big data’: a definition. *Stamford, CT: Gartner*, pages 2014–2018, 2012.
- [8] Lauren Alexander, Shan Jiang, Mikel Murga, and Marta C González. Origin–destination trips by purpose and time of day inferred from mobile phone data. *Transportation research part c: emerging technologies*, 58:240–250, 2015.
- [9] Tapas Saini, Kruti Barot, Amritanshu Sinha, Rajesh Gogineni, Rajesh Krishnan, Venkata Srikanth, Shikha Sinha, and Rakesh Behera. Estimating origin-destination matrix using telecom network data.

- [10] Rein Ahas, Siiri Silm, Olle Järv, Erki Saluveer, and Margus Tiru. Using mobile positioning data to model locations meaningful to users of mobile phones. *Journal of urban technology*, 17(1):3–27, 2010.
- [11] Ying Zhang. User mobility from the view of cellular data networks. In *IEEE INFOCOM 2014-IEEE Conference on Computer Communications*, pages 1348–1356. IEEE, 2014.
- [12] Gyan Ranjan, Hui Zang, Zhi-Li Zhang, and Jean Bolot. Are call detail records biased for sampling human mobility? *ACM SIGMOBILE Mobile Computing and Communications Review*, 16(3):33–44, 2012.
- [13] Shan Jiang, Joseph Ferreira, and Marta C Gonzalez. Activity-based human mobility patterns inferred from mobile phone data: A case study of singapore. *IEEE Transactions on Big Data*, 3(2):208–219, 2017.
- [14] Cory M Krause and Lei Zhang. Short-term travel behavior prediction with gps, land use, and point of interest data. *Transportation Research Part B: Methodological*, 123:349–361, 2019.
- [15] Daniel Ashbrook and Thad Starner. Using gps to learn significant locations and predict movement across multiple users. *Personal and Ubiquitous computing*, 7(5):275–286, 2003.
- [16] Lin Liao, Donald J Patterson, Dieter Fox, and Henry Kautz. Learning and inferring transportation routines. *Artificial Intelligence*, 171(5-6):311–331, 2007.
- [17] Marcela A Munizaga and Carolina Palma. Estimation of a disaggregate multimodal public transport origin–destination matrix from passive smart-card data from santiago, chile. *Transportation Research Part C: Emerging Technologies*, 24:9–18, 2012.
- [18] Vincent W Zheng, Yu Zheng, Xing Xie, and Qiang Yang. Collaborative location and activity recommendations with gps history data. In *Proceedings*

- of the 19th international conference on World wide web, pages 1029–1038, 2010.
- [19] Carlo Ratti, Dennis Frenchman, Riccardo Maria Pulselli, and Sarah Williams. Mobile landscapes: using location data from cell phones for urban analysis. *Environment and planning B: Planning and design*, 33(5):727–748, 2006.
- [20] Nina Glick Schiller, Linda Basch, and Cristina Szanton Blanc. From immigrant to transmigrant: Theorizing transnational migration. *Anthropological quarterly*, pages 48–63, 1995.
- [21] Stephen Kaisler, Frank Armour, J Alberto Espinosa, and William Money. Big data: Issues and challenges moving forward. In *2013 46th Hawaii International Conference on System Sciences*, pages 995–1004. IEEE, 2013.
- [22] MKDT Maldeniya, Sriganesh Lokanathan, and Amal S Kumarage. An assessment of mobile network big data-based insights for transport planning in sri lanka. *Colombo, Sri Lanka 3 rd and 4 th June, 2016*, 2016.
- [23] Manoranjan Dash, Kee Kiat Koo, James Decraene, Ghim-Eng Yap, Wei Wu, Joao Bartolo Gomes, Amy Shi-Nash, and Xiaoli Li. Cdr-to-movis: Developing a mobility visualization system from cdr data. In *2015 IEEE 31st International Conference on Data Engineering*, pages 1452–1455. IEEE, 2015.
- [24] Ziliang Zhao, Shih-Lung Shaw, Yang Xu, Feng Lu, Jie Chen, and Ling Yin. Understanding the bias of call detail records in human mobility research. *International Journal of Geographical Information Science*, 30(9):1738–1762, 2016.
- [25] Pu Wang, Timothy Hunter, Alexandre M Bayen, Katja Schechtner, and Marta C González. Understanding road usage patterns in urban areas. *Scientific reports*, 2:1001, 2012.

- [26] Erik Mellegard, Simon Moritz, and Mohamed Zahoor. Origin/destination-estimation using cellular network data. In *2011 IEEE 11th International Conference on Data Mining Workshops*, pages 891–896. IEEE, 2011.
- [27] Kevin S Kung, Kael Greco, Stanislav Sobolevsky, and Carlo Ratti. Exploring universal patterns in human home-work commuting from mobile phone data. *PloS one*, 9(6), 2014.
- [28] Yan Leng et al. *Urban computing using call detail records: mobility pattern mining, next-location prediction and location recommendation*. PhD thesis, Massachusetts Institute of Technology, 2016.
- [29] Olle Järv, Rein Ahas, and Frank Witlox. Understanding monthly variability in human activity spaces: A twelve-month study using mobile phone call detail records. *Transportation Research Part C: Emerging Technologies*, 38:122–135, 2014.
- [30] Victor Powell and L Lehe. Principal component analysis. URL <http://setosa.io/ev/principalcomponent-analysis>, 2015.
- [31] Samiul Hasan, Christian M Schneider, Satish V Ukkusuri, and Marta C González. Spatiotemporal patterns of urban human mobility. *Journal of Statistical Physics*, 151(1-2):304–318, 2013.
- [32] Francesco Calabrese, Giusy Di Lorenzo, Liang Liu, and Carlo Ratti. Estimating origin-destination flows using mobile phone location data. *IEEE Pervasive Computing*, (4):36–44, 2011.
- [33] Sri lanka telecom - annual report. 2016.
- [34] Gabriel Kreindler and Yuhei Miyauchi. Commuting and productivity: Quantifying urban economic activity using cell phone data, 2015.
- [35] Kaushalya Madhawa, Sriganesh Lokanathan, Rohan Samarajiva, and Danaja Maldeniya. Understanding communities using mobile network big data cprsouth 2015. 2015.

- [36] Kaushalya Madhawa, Sriganesh Lokanathan, Danaja Maldeniya, and Rohan Samarajiva. Using mobile network big data for land use classification. In *Communication Policy Research South Conference*, 2015.
- [37] Rohan Samarajiva. Policy commentary: mobilizing information and communications technologies for effective disaster warning: lessons from the 2004 tsunami. *New Media & Society*, 7(6):731–747, 2005.
- [38] Danaja Maldeniya, Amal Kumarage, Sriganesh Lokanathan, Gabriel Kreindler, and Kaushalya Madhawa. Where did you come from?: where did you go?; robust policy relevant evidence from mobile network big data. 2015.
- [39] Danaja Maldeniya, Sriganesh Lokanathan, and Amal Kumarage. Origin-destination matrix estimation for sri lanka using mobile network big data. In *Proceedings of the 13th International Conference on Social Implications of Computers in Developing Countries, Negombo, Sri Lanka*, 2015.
- [40] Zhan Zhao, Jinhua Zhao, and Haris N Koutsopoulos. Individual-level trip detection using sparse call detail record data based on supervised statistical learning. In *Proc. Transp. Res. Board 95th Annu. Meeting*, pages 1–18, 2016.
- [41] Balázs Cs Csáji, Arnaud Browet, Vincent A Traag, Jean-Charles Delvenne, Etienne Huens, Paul Van Dooren, Zbigniew Smoreda, and Vincent D Blondel. Exploring the mobility of mobile phone users. *Physica A: statistical mechanics and its applications*, 392(6):1459–1473, 2013.
- [42] Ming-Heng Wang, Steven D Schrock, Nate Vander Broek, and Thomas Mulinazzi. Estimating dynamic origin-destination data and travel demand using cell phone network data. *International Journal of Intelligent Transportation Systems Research*, 11(2):76–86, 2013.
- [43] Sibren Isaacman, Richard Becker, Ramón Cáceres, Stephen Kobourov, Margaret Martonosi, James Rowland, and Alexander Varshavsky. Identifying

- important places in people’s lives from cellular network data. In *International Conference on Pervasive Computing*, pages 133–151. Springer, 2011.
- [44] Shan Jiang, Gaston A Fiore, Yingxiang Yang, Joseph Ferreira Jr, Emilio Frazzoli, and Marta C González. A review of urban computing for mobile phone traces: current methods, challenges and opportunities. In *Proceedings of the 2nd ACM SIGKDD international workshop on Urban Computing*, pages 1–9, 2013.
- [45] Kentaro Toyama and Ramaswamy Hariharan. Modeling location histories, May 18 2010. US Patent 7,720,652.
- [46] Urban transport system development project for colombo metropolitan region and suburbs. 2014.
- [47] Ramaswamy Hariharan and Kentaro Toyama. Project lachesis: parsing and modeling location histories. In *International Conference on Geographic Information Science*, pages 106–124. Springer, 2004.
- [48] Yoshua Bengio and Paolo Frasconi. An input output hmm architecture. In *Advances in neural information processing systems*, pages 427–434, 1995.
- [49] Yoshua Bengio and Paolo Frasconi. Input-output hmms for sequence processing. *IEEE Transactions on Neural Networks*, 7(5):1231–1249, 1996.
- [50] Yi Zhang, Xiao Qin, Shen Dong, and Bin Ran. Daily od matrix estimation using cellular probe data. In *89th Annual Meeting Transportation Research Board*, volume 9, 2010.