Martin Fleischmann

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EDUCATION

Ph.D. Urban Morphology, University of Strathclyde, Glasgow, 2021

MSc. Urban Design, University of Strathclyde, Glasgow, 2017

ACADEMIC APPOINTMENTS

2023– The Alan Turing Institute
Postdoctoral Research Associate, Urban Analytics programme

2022 Charles University in Prague

Postdoctoral Researcher, Department of Social Geography and Regional Development

2020-22 University of Liverpool

Research Associate, Department of Geography and Planning

PROFESSIONAL APPOINTMENTS

2022- UrbanDataLab AG, Head of Data and Analytics

SELECTED PUBLICATIONS

- Calafiore, A., Samardzhiev, K., Rowe, F., Fleischmann, M., and Arribas-Bel, D., 'Inequalities in experiencing urban functions. An exploration of human digital (geo-)footprints' *Environment and Planning B: Urban Analytics and City Science* 0 (0). doi:10.1177/23998083231208507
- Fleischmann, M. 'Clustergram: Visualization and diagnostics for cluster analysis'. *Journal of Open Source Software* 8 (89), 5240. doi:10.21105/joss.05240
- Wang, J., Fleischmann, M., Venerandi, A., Romice, O., Kuffer, M., and Porta, S. 'EO + Morphometrics: Understanding cities through urban morphology at large scale' *Landscape and Urban Planning*, 233. doi:10.1016/j.landurbplan.2023.104691
- Rowe, F., Calafiore, A., Arribas-Bel, D., Samardzhiev, K., and Fleischmann, M. 'Urban exodus? Understanding human mobility in Britain during the COVID-19 pandemic using Meta-Facebook data' *Population, Space and Place*, e2637. doi:10.1002/psp.2637
- Arribas-Bel, D. and Fleischmann, M. 'Spatial Signatures: Understanding (urban) spaces through form and function' *Habitat International*, 128, (102641). doi:10.1016/j.habitatint.2022.102641
- Fleischmann, M. and Arribas-Bel, D. 'Geographical characterisation of British urban form and function using the spatial signatures framework' *Scientific Data*, 9, (546). doi:10.1038/s41597-022-01640-8
- Samardzhiev, K., Fleischmann, M., Arribas-Bel, D., Calafiore, A., Rowe, F. 'Functional Signatures in Great Britain: A dataset.' *Data in Brief*, 108335, doi:10.1016/j.dib.2022.108335

- Singleton, A., Arribas-Bel, D., Murray, J., and Fleischmann, M. 'Estimating generalized measures of local neighbourhood context from multispectral satellite images using a convolutional neural network.' *Computers, Environment and Urban Systems*, 95, 101802. doi:10.1016/j.compenvurbsys.2022.101802
- Fleischmann, M., Feliciotti, A., Romice, O. and Porta, S. 'Methodological Foundation of a Numerical Taxonomy of Urban Form.' *Environment and Planning B: Urban Analytics and City Science* 49 (4), 1283-1299. doi:10.1177/23998083211059835
- Fleischmann, M., Feliciotti, A. and Kerr, W. 'Evolution of urban patterns: urban morphology as an open reproducible data science.' *Geographical Analysis* 54 (3). doi:10.1111/gean.12302
- Fleischmann, M., Romice, O. and Porta, S. 'Measuring urban form: overcoming terminological inconsistencies for a quantitative and comprehensive morphologic analysis of cities.' *Environment and Planning B: Urban Analytics and City Science* 48 (8), 2133-2150. doi:10.1177/2399808320910444
- Fleischmann, M., Feliciotti, A., Romice, O. and Porta, S. 'Morphological tessellation as a way of partitioning space: Improving consistency in urban morphology at the plot scale' *Computers*, *Environment and Urban Systems* 80, 101441. doi:10.1016/j.compenvurbsys.2019.101441
- Fleischmann, M. 'momepy: Urban Morphology Measuring Toolkit' *Journal of Open Source Software* 4 (43), 1807. doi:10.21105/joss.01807

RESEARCH SOFTWARE DEVELOPMENT

- 2023- geodatasets: spatial data examples. (author and maintainer)
- 2022 Xvec: vector data cubes for Xarray. (author and maintainer)
- 2021– xyzservices: source of XYZ tiles providers. (author and maintainer)
- 2020- clustergram: visualization and diagnostics for cluster analysis (author and maintainer)
- 2020- PySAL: Python Spatial Analysis Library (core developer)
- GeoPandas: an open source project to make working with geospatial data in python easier (core developer)
- 2018– momepy: Urban Morphology Measuring Toolkit (author and maintainer)

EDITORIAL APPOINTMENTS

2021– Journal of Open Source Software Editor

RESEARCH INCOME

Awards

- 2023 Primus Research Programme, Charles University 'Influence of Socioeconomic and Cultural Factors on Urban Structure in Central Europe', €325,000
- NumFOCUS 'Create a more consistent geometry API through the feature parity between low-level (Shapely) and high-level (GeoPandas) packages', \$8,000
- 2020 NumFOCUS 'Improvement and modernization of GeoPandas documentation', \$5,000
- 2018 University of Strathclyde 'John Anderson Research Award', £60,000

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