

Yair Grinberger – Curriculum Vitae
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Higher Education

- 2008-2011 The Hebrew University of Jerusalem, Department of Geography, B.A., Geography and complementary studies, with a program in Geoinformatics.
- 2011-2012 The Hebrew University of Jerusalem, Department of Geography, M.A., Geography, Planning and Environment, with a specialization in Urban and Regional Planning [direct transition to PhD track after one year of studies].
- 2012-2017 The Hebrew University of Jerusalem, Department of Geography, PhD, Geography, supervisor: Prof. Noam Shoval.
- 2017-2019 Heidelberg University, Germany, Institute of Geography, *Alexander von Humboldt Postdoctoral Fellowship*, host: Prof. Dr. Alexander Zipf.

Appointments at the Hebrew University

- 2019-2023 Lecturer, Faculty of Social Sciences, Department of Geography
- 2023- Senior Lecturer, Faculty of Social Sciences, Department of Geography

Additional functions at the Hebrew University

- 2020-2024 B.A. students Advisor, Department of Geography
- 2020-2024 Member of the Teaching Committee, Department of Geography
- 2020- Member of the Computational Geography Committee, Department of Geography
- 2021-2022, 2024- Advisor for the Program in Geoinformatics, Department of Geography, the Hebrew University of Jerusalem
- 2024- Member of the research committee, Faculty of Social Sciences

Awards and Fellowships

- 2011-2013 Amiran Fellowship for Outstanding Research Students, MA award, Geography Department, The Hebrew University of Jerusalem, Israel.
- 2013-2017 Hebrew University President 4-year Fellowship, the Hebrew University of Jerusalem, Israel.
- 2013-2017 Amiran Fellowship for Outstanding Research Students, PhD award, Geography Department, The Hebrew University of Jerusalem, Israel.
- 2016 Best PhD Paper Award, The Israeli Geographical Association
- 2017-18 *Fulbright* Post-doctoral Scholar Award, United States-Israel Educational Foundation. This award was not realized due to the choice of Heidelberg as the place for post-doctoral research.
- 2017-2019 *Alexander von-Humboldt* Research Fellowship for Postdoctoral Researchers, Alexander von-Humboldt Foundation.
- 2022 List of outstanding teachers, Social Sciences Faculty, The Hebrew University of Jerusalem

Other academic activity

- 2019 Co-chair, GEOgraphical and CULTtural aspects of Geo-information: Issues and Solutions (GEOCULTGIS), AGILE2019 Workshop, Limassol, Cyprus.
- 2019 Co-chair, scientific committee of the Academic Track, State of the Map 2019, Heidelberg, Germany.
- 2020 Co-chair, scientific committee of the Academic Track, FOSS4G Europe 2020, Valmiera, Latvia.

- 2020 Co-chair, scientific committee of the Academic Track, State of the Map 2020, virtual conference.
- 2021 Guest editor, "Geographical and Cultural Aspects of Geo-Information: Issues and Solutions", special collection of *Transactions in GIS*.
- 2021 Co-chair, scientific committee of the Academic Track, State of the Map 2021, virtual conference.
- 2021 Guest editor, "Papers from FOSS4G Europe 2020", special issue of *Baltic Journal of Modern Computing*.
- 2022 Co-chair, scientific committee of the Academic Track, State of the Map 2022, Florence, Italy.
- 2022 Guest editor, "OpenStreetMap as a Multi-disciplinary Nexus: Perspectives, Practices and Procedures", special issue of *ISPRS International Journal of Geo-Information*.
- 2022- Co-chair, ISPRS Working Group IV/6 – Human Behaviour and Spatial Interactions
- 2023 Co-chair, GeoHB 2023: Geo-spatial computing for understanding human behaviors workshop, ISPRS Geospatial Week 2023, Cairo, Egypt.
- 2023 Co-chair, OSM Science 2023, Antwerp, Belgium.
- 2024 Co-chair, OSM Science 2024, Nairobi, Kenya.
- 2025 Guest editor, "Imagery Analytics for Understanding Human-Urban Infrastructure Interactions", special issue of *ISPRS Journal of Photogrammetry and Remote Sensing*.
- 2025 Co-chair, OSM Science 2025, Manilla, Philippines

Research grants

- 2018-2019 Survey of Israel, "An Algorithm for Identifying the Components of Demand in Local Housing Markets"
- 2020-2021 Ministry of Science and Technology, Israel, "Agent-Based Simulation of the Spatial Contagion of the Coronavirus in Israeli Cities"
- 2020-2022 Vice-President Support for Research, HUJI, "An urban agent-based simulation of Covid-19 contagion"
- 2020-2021 Ring foundation for Atmospheric and Global Studies, "Ecological Modeling of the First Urban Cycle in the Southern Levant"
- 2021-2025 University of Toronto – Hebrew University of Jerusalem Research & Training Alliance, "Models of Urban Evolution"
- 2021-2022 President Support for Research, "Analysis Frameworks for Innovative Transportation Management" (under the Center for Urban Innovation)
- 2022-2024 Zelman Cowen Academic Initiatives, "Assessing the Effectiveness of Non-Pharmaceutical Interventions for Spatial Containment of Covid-19 using Urban Simulation and Machine Learning"
- 2022-2023 The Pinhas Sapir Economic Policy Forum, "Simulating the Effect of Government Assistance to the Business Sector in the Wake of Covid-19"
- 2023 Social Sciences Faculty research grants, "Identifying spatial organization patterns in cemeteries and their use for identifying cultural processes in the burying society"
- 2024-2025 Archimedes Center, "Leveraging machine-learning techniques to enhance the robustness of agent-based models"
- 2024-2028 Israel Science Foundation, "The effects pf corporate engagement on collective intelligence in OpenStreetMap"

- 2024-2025 Digital Infrastructure Insights Fund (Ford Foundation & Sloan Foundation),
"Impacts of corporate editors on collective intelligence in OpenStreetMap"
- 2024-2026 Ministry of Innovation, Science & Technology, "A simulation-based urban
dashboard for improving municipal preparedness to earthquakes"

Teaching at the Hebrew University

Courses:

Geoinformatics B, BA course
Urban simulation, MA course (open to BA students)
Introduction to geospatial data science, MA course (open to BA students)
Analyzing human spatial activity using digital data, MA course (open to BA students)
Social aspects of GIS: Theory and practice, MA course
Geoinformatics and geographical information science, MA course
Spatial Computing in Python, MA course (open to BA students)
Intro to Spatial Statistics, MA course

Supervision:

- 12 MA theses (6 completed)
- 2 PhD dissertations (0 completed)
- 3 Post-doctoral fellows (2 completed, 1 secured a tenure-track position)

List of Publications

Doctoral dissertation:

- 1) An Integrative Model of Time-Space Behavior, supervisor: Prof. Noam Shoval, 2017, unpublished dissertation, derived publications: 12, 21, 22 in the list below.

Chapters in collections:

- 2) Felsenstein, D., Ashbel, A., Lichter, M., & **Grinberger, Y.** (2013). Land use-land cover dynamics at the metropolitan fringe. In D. Malkinson, D. Czamanski & I. Benenson (Eds.) *Modeling of land-use and ecological dynamics* (pp. 143-165). Springer: Berlin-Heidelberg.
- 3) **Grinberger, A.Y.**, Lichter, M., & Felsenstein, D. (2015). Simulating urban resilience: disasters, dynamics and (synthetic) data. In S. Geertman, J. Stillwell, J. Ferreira & R. Goodspeed (Eds.) *Planning support systems and smart cities* (pp. 99-119). Springer: Cham.
- 4) **Grinberger, A.Y.**ⁱ, & Felsenstein, D.ⁱ (2017). A tale of two earthquakes: Dynamic agent-based simulation of urban resilience. In J. Lombard, E. Stern & G. Clarke (Eds.) *Applied spatial modeling and planning* (pp. 134-154). Routledge: Abingdon & New York.
- 5) **Grinberger, A.Y.**, Lichter, M., & Felsenstein, D. (2017). Dynamic agent based simulation of an urban disaster using synthetic big data. In P. Thakuria, N. Tilahun & M. Zellner (Eds.) *Seeing cities through big data: Theory methods and applications in urban informatics* (pp. 349-382). Springer: Cham.
- 6) **Grinberger, A.Y.**, & Felsenstein, D. (2017). Using big (synthetic) data to identify local housing market attributes. In L.A. Schintler & Z. Chen (Eds.) *Big data for urban & regional science* (pp. 109-120). Routledge: Adingdon & New York.
- 7) Birenboim, A., **Grinberger, A.Y.**, Novelli, E.M., & Jonassaint, C.R. (2018). Daily monitoring of mobility as indicator of wellbeing among individuals with chronic disease. In M. Friman, D. Ettema & L. E. Olsson (Eds.) *Quality of life and daily travel (Best practices)* (pp. 219-234). Springer: Cham.
- 8) **Grinberger, A.Y.**, Felsenstein, D., & Samuels, P. (2019). Emerging urban dynamics and labor market change: An agent-based simulation of recovery from a disaster. In K. Borsekova & P. Nijkamp (Eds.) *Resilience and Urban Disasters* (pp. 232-256). Edward Elgar: Cheltenham.

- 9) Noskov, A., **Grinberger, A.Y.**, Papapessio, N., Rousell, A., Troilo, R., & Zipf, A. (2019). Modelling and Assessing Spatial Big Data: Uses Cases of the OpenStreetMap Full-History Dump. In A. Voghera & L. La Riccia (Eds.) *Spatial Planning in the Big Data Revolution* (pp. 16-44). IGI Global.
- 10) Mooney, P., **Grinberger, A. Y.**, Minghini, M., Coetzee, S., Juhász, L., & Yeboah, G. (2021). OpenStreetMap data use cases during the early months of the COVID-19 pandemic. In A. Rajabifard, D. Paez, & G. Foliente (Eds.) *COVID-19 Pandemic, Geospatial Information, and Community Resilience* (pp. 171-186). CRC Press: Boca Raton.
- 11) Lin, Z. H., Grinberger, A. Y., & Felsenstein, D. (2025). Simulating Covid-19 contagion patterns using a machine-learning augmented agent-based model. In Kopczewska, K., Czamanski, D., & Broitman, D. (eds.) *Handbook on Big Data, Artificial Intelligence, and Cities* (327-348). Edward Elgar.

Articles in per-reviewed journals:

- 12) **Grinberger, A.Y.**, Shoval, N., & McKercher, B. (2014). Typologies of tourist time-space consumption: a new approach using GPS data and GIS tools. *Tourism Geographies*, 16(1), 105-123.
- 13) **Grinberger, A.Y.**, & Felsenstein, D. (2014). Bouncing back or bouncing forward? Simulating urban resilience. *Proceedings of the ICE: Urban Design and Planning*, 167(3), 115-124.
- 14) **Grinberger, A.Y.**, & Felsenstein, D. (2014). Back to routine or a new routine? Simulation of urban resilience. *Planning*, 11(2), 19-29 (in Hebrew).
- 15) **Grinberger, A.Y.**, & Shoval, N. (2015). A temporal-contextual analysis of urban dynamics using location-based data. *International Journal of Geographic Information Science*, 29(11), 1969-1987.
- 16) **Grinberger, A.Y.**, Lichter, M. & Felsenstein, D. (2015). Planning post-disaster urban recovery using synthetic big data. *Planning*, 12(2), 59-83 (in Hebrew).
- 17) Lichter, M., **Grinberger, A.Y.**, & Felsenstein, D. (2015). Simulating and communicating outcomes in disaster management situations. *ISPRS International Journal of Geo-Information*, 4(4), 1827-1847.
- 18) **Grinberger, A.Y.**, & Felsenstein, D. (2016). Dynamic agent-based simulation of welfare effects of urban disaster. *Computers, Environment and Urban Systems*, 59, 129-141.
- 19) **Grinberger, A.Y.**, & Samuels, P. (2018). Modeling the labor market in the aftermath of a disaster: Two perspective. *International Journal of Disaster Risk Reduction*, 31, 419-434.
- 20) Mas, E., Felsenstein, D., Moya, L., **Grinberger, A.Y.**, Das, R., & Koshimura, S. (2018). Dynamic Integrated Model for Disaster Management and Socio-Economic Analysis (DIM2SEA). *Journal of Disaster Research*, 13(7), 1257-1271.
- 21) **Grinberger, A.Y.**, & Shoval, N. (2019). Spatio-temporal contingencies in tourists' intra-diurnal mobility patterns. *Journal of Travel Research*, 58(3), 512-530.
- 22) **Grinberger A.Y.** (2019). Weighting the effects of spatial cognition and activity anchors on time-space activity. *The Professional Geographer*, 71(1), 52-64.
- 23) Mocnik, F.-B., Ludwig, C., **Grinberger, A.Y.**, Jacobs, C., Klonner, C., & Reifer, M. (2019). Shared data sources in the geographical domain – a classification schema and visualization techniques. *ISPRS International Journal of Geo-Information*, 8(5), 242.
- 24) Felsenstien, D., & **Grinberger, A.Y.** (2020). Cascading effects of a disaster on the labor market over the medium to long term. *International Journal of Disaster Risk Reduction*, 47, 101524.
- 25) Schott, M., **Grinberger, A. Y.**, Lautenbach, S., & Zipf, A. (2021). The impact of community happenings in OpenStreetMap – Establishing a framework for online community member activity analyses. *ISPRS International Journal of Geoinformation*, 10(3), 164.

- 26) **Grinberger, A. Y.**, Schot, M., Raifer, M., & Zipf, A. (2021). An analysis of the spatial and temporal distribution of large-scale data production events in OpenStreetMap. Transactions in GIS, 25(2), 622-641.
- 27) **Grinberger, A. Y.**, & Novack, T. (2021). The geographical and cultural aspects of geoinformation. Transactions in GIS, 25(2), 577-578.
- 28) **Grinberger, A. Y.**, Minghini, M., Yeboah, G., Juhász, L., & Mooney, P. (2022). Bridges and barriers: An exploration of engagements of the research community with the OpenStreetMap community. ISPRS International Journal of Geo-Information, 11(1), 54.
- 29) **Grinberger, A. Y.**, Minghini, M., Juhász, L., Yeboah, G., & Mooney, P. (2022). OSM Science – the academic study of the OpenStreetMap project, data, contributors, community, and applications. ISPRS International Journal of Geo-Information, 11(4), 230.
- 30) Dai, X. , Felsenstein, D., & **Grinberger, A. Y.** (2023). Viewshed effects and house prices: Identifying the visibility value of the natural landscape. *Landscape and Urban Planning*, 238, 104818.
- 31) **Grinberger, A. Y.**, & Felsenstein, D. (2023). Agent-based simulation of COVID-19 containment measures: The case of lockdowns in cities. Letters in Spatial and Resource Sciences, 16(1), 10.
- 32) Huang, W., Chen, B., Biljecki, F., Yan, Y., **Grinberger, A. Y.**, & Li, H. (2023). Preface: Workshop “GeoHB 2023: Geo-Spatial Computing for Understanding Human Behaviours”. International Archives of the Photogrammetry, Remote Sensing, and Spatial Information Sciences, XLVII-1/W2-2023, 1985-1986.
- 33) Keidar, N., Fox, M., Friedman, O. , **Grinberger, A. Y.** , Kirresh, T., Li, Y., Rosner Manor, Y., Rotman, D., Silverman, E., & Brail, S. (2024). Progress in placemaking. Planning Theory & Practice, 25(1), 143-151.
- 34) Wachtel, I., Davidovic, U., **Grinberger, A. Y.**, Zidon, R. (2025). Ancient Levantine demography follows ecological stochasticity. Scientific Reports, 15(1), 5044.
- 35) Chen, H., Liu, X., Li, S., **Grinberger, A. Y.**, Wu, H., Liu, C., & Huang, W. (2025). Spatiotemporal dynamics of violence in social unrest events based on geo-social media data. Environment and Planning B: Urban Analytics and City Science.

Conference Proceedings:

- 36) **Grinberger, A. Y.**, Novack, T., Schultz, M., Zipf, A., & Mooney, P. (eds.) *Proceedings of the AGILE 2019 Workshop on Geographical and Cultural Aspects of Geo-Information: Issues and Solutions*. Heidelberg University: Limassol, Cyprus.
- 37) Minghini, M., **Grinberger, A. Y.**, Mooney, P., Juhász, L., & Yeboah, G. (eds.) *Proceedings of the Academic Track at State of the Map 2019*. Zenodo: Heidelberg, Germany.
- 38) Minghini, M., Coetzee, S., Juhász, L., **Grinberger, A. Y.**, Mooney, P., & Yeboah, G. (eds.) *Proceedings of the Academic Track at State of the Map 2020*. Zenodo: Online Conference.
- 39) Nartiss, M., **Grinberger, A. Y.**, Minghini, M., Ilie, C. M., & Marin, A. (eds.) Papers from the (cancelled) international conference FOSS4G Europe 2020. *Baltic Journal of Modern Computing*, 9(1), 111-154. Conference cancelled due to Covid-19.
- 40) Minghini, M., Ludwig, C., Anderson, J., Mooney, P., & **Grinberger, A. Y.** (eds.) *Proceedings of the Academic Track at State of the Map 2021*. Zenodo: Online Conference.
- 41) Minghini, M., Liu, P., Li, H., **Grinberger, A. Y.**, & Juhász, L. (eds.) *Proceedings of the Academic Track at State of the Map 2022*. Zenodo: Florence, Italy.
- 42) Minghini, M., Li, H., **Grinberger, A. Y.**, Liu, P., Yeboah, G., Juhász, L., Coetzee, S., Mooney, P., Sarretta, A., & Anderson, J. (eds.) *Proceedings of OSM Science 2023*. Zenodo: Antwerp, Belgium.
- 43) **Grinberger, A. Y.**, Mooney, P., & Minghini, M. (eds.) *Proceedings of OSM Science 2024*. In press.