Wonyoung So

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Education

2020– **Ph.D. in Urban Science and Planning**, *Massachusetts Institute of Technology (MIT)*
Thesis: Reparative Urban Science
Advisor: Catherine D'Ignazio

2020 **Master in City Planning**, *Massachusetts Institute of Technology (MIT)*
Thesis: Wesurvived.nyc: Participatory Mapping as a Political Act
Committee: Catherine D'Ignazio, Shannon Mattern (New School), Arvind Satyanarayan (MIT EECS)

2015 **Bachelor of Fine Arts in Visual Communication Design**, *Kookmin University*

Selected Professional Experience

2021– **Graduate Teaching Assistant**, *Massachusetts Institute of Technology (MIT)*
Courses taught: Introduction to Spatial Analysis and GIS Laboratory, Workshop on Geographic Information Systems (GIS),
Crowd Sourced City: Civic Tech Prototyping, Quantitative Reasoning and Statistical Methods for Planning I,
Thesis Clinic (Masters in City Planning)

2020– **Research Assistant & Technical Lead,** *Data + Feminism Lab, MIT DUSP*
Currently leading *Audit the Streets*, a national-scale database and public archive examining commemoration and contestation in
the built environment in the United States. Under the supervision of Catherine D'Ignazio.

2016 **Research Fellow & Data Visualization Specialist,** *MIT Senseable City Lab, MIT DUSP*
Worked with urban researchers to make urban data more communicative, visible and understandable. Was a lead data visualization designer
on developing a data visualization to evaluate and compare urban canopy cover of world cities.
Was a lead data visualization designer of a multidisciplinary research team in collaboration with department of biology and civil engineering,
working on finding algorithms to analyze the sewage network in Cambridge and producing various data visualizations that shows urban health
pattern by sampling sewers. Under the supervison of Carlo Ratti

2017 **Curator,** *2017 Seoul Biennale of Architecture and Urbanism*
Curated Seoul Libre Maps with E Roon Kang. Commissioned by the 2017 Seoul Biennale of Architecture and Urbanism. It proposed ways to
overcome social, technical, and policy constraints related to online mapping culture in Korea, by inviting artists to hold participatory work-
shops, to identify the new meaning of the map as a public good.

2011–2013 **Co-founder & Inside Director,** *Tumblbug inc*
Co-founded a crowdfunding platform for creative projects, which is now the largest one in South Korea (20M pledges as of 2017, Series Seed at
2012, Series A at 2015).
Led a team of developers and designers of the platform and played a major role as a community manager, who tries to find new creators to be
involved in the platform and encouraging them to use it.

Selected Peer-Reviewed Publications

2022 **Which information matters? Measuring landlord assessment of tenant screening reports.** So, W. (2022).
Housing Policy Debate, 1–27.

2022 **Beyond fairness: Reparative algorithms to address historical injustices of housing discrimination in the US.** So, W., Lohia,
P., Pimplikar, R., Hosoi, A. E., & D'Ignazio, C. (2022). *2022 ACM Conference on Fairness, Accountability, and Transparency (ACM
FAccT)*, 988–1004. [video]

2022 **The Audit: Perils and possibilities for contesting oppression in the heritage landscape.** D'Ignazio, C., So, W., & Ntim-Addae, N.
(2022). *In The Routledge Handbook of Architecture, Urban Space and Politics, Volume I. Routledge.*

2022 **Towards Intersectional Feminist and Participatory ML: A Case Study in Supporting Feminicide Counterdata Collection.**
Suresh, H., Movva, R., Dogan, A. L., Bhargava, R., Cruxen, I., Cuba, A. M., Taurino, G., So, W., & D'Ignazio, C. *2022 ACM
Conference on Fairness, Accountability, and Transparency (ACM FAccT)*, 667–678. **Best student paper award.**

2022 **Feminicide and counterdata production: Activist efforts to monitor and challenge gender-related violence.** D'Ignazio, C.,
Cruxen, I., Suárez Val, H., Cuba, A. M., Garcia-Montes, M., Fumega, S., Suresh, H., & So, W. *Patterns*, 3(7), 100530.

2020 **Cartographers of North Korea: Who are they and what are the technical, political, and social issues involved in mapping
North Korea.** So, W., & Duarte, F. (2020). *Geoforum*, 110, 147–156.

2020 **Humane Visual AI: Telling the stories behind a medical condition.** So, W., Bogucka, E. P., Scepanovic, S., Joglekar, S., Zhou,
K., & Quercia, D. (2020). *IEEE Transactions on Visualization and Computer Graphics*, 678–688.

2020 **Cartographic design of cultural maps.** Bogucka, E. P., Constantinides, M., Aiello, L. M., Quercia, D., So, W., & Bancilhon, M.
(2020). *IEEE Computer Graphics and Applications*, 12-20.

Selected Workshop Papers

2022   **News as Data for Activists: a case study in feminicide counterdata production.** Bhargava, R., Suresh, H., Dogan, A., <u>So, W.</u>, Suarez Val, H., Fumega, S., and D'Ignazio, C. (2022). *Computation + Journalism 2022. New York, NY.*

2020   **Feminicide & Machine Learning: Detecting Gender-based Violence to Strengthen Civil Sector Activism.** D'Ignazio, C., Val, H., Fumega, S., Suresh, H., Cruxen, I., <u>So, W.</u>, Martinez, A., and Garcia-Montes, M. (2020). *MD4SG '20: 4th Workshop on Mechanism Design for Social Good*, August 17-19, 2020. **New Horizons award for most inspiring paper.**

Essays and Reports

2021   **Landlord Tech in Covid-19 Times.** McElroy, E. & <u>So, W.</u> (2021). *Metropolitics.*

2021   **Keeping an Eye on Landlord Tech.** McElroy, E, <u>So, W.</u>, and Weber, N. (2021). *Shelterforce.*

2017   **Urban Data Visualization.** <u>So, W.</u> (2017). *May 2017 Landscape Architecture Korea, Seoul, Korea.*

2017   **Seoul Libre Maps.** <u>So, W.</u> (2017). In *Imminent Commons: Live from Seoul. Actar Publishers. New York, NY.*

Fellowships and Grants

2023   **Mozilla Technology Fund,** *Mozilla Foundation*

2021   **Human Rights & Technology Fellowship,** *MIT Center for International Studies*

2021   **Harold Horowitz (1951) Student Research Fund,** *School of Architecture and Planning, MIT*

2020   **Presidential Fellowship,** *MIT*

2018-2020   **Graduate Academic Fellowship,** *Department of Urban Studies and Planning, MIT*

Selected Awards

2019   **Gold Winner.** *Kantar Information is Beautiful Awards. London, United Kingdom.*

2020   **Honorable Mention.** *Fast Co. Innovation by Design Awards (Data and Design). New York, NY.*

2017   **Shortlist.** *Kantar Information is Beautiful Awards. London, United Kingdom.*

2017   **Finalist.** *Fast Co. Innovation by Design Awards (Graphic Design and Data Visualization).* Treepedia. *New York, NY.*

2016   **Research Grant (Third Grade).** *Open Net Research Paper Competition. Seoul, Korea.*

2015   **Longlist.** *Kantar Information is Beautiful Awards. London, United Kingdom.*

2012   **Finalist.** *Adobe Design Achievement Awards (Browser Based Design). Toronto, Canada.*

2009   **Semi-Finalist.** *Adobe Design Achievement Awards (Application Development). New York, NY.*

2008   **Finalist.** *Adobe Design Achievement Awards (Designer-developer Collaboration). New York, NY.*

Service

Reviewing   *ACM FAccT 2023. ACM EAAMO 2022. Housing Policy Debate 2023.*

Committee   *PhD Admission Committee 2022-2023 (MIT DUSP). PhD Committee 2020 (MIT DUSP) Master in City Planning Admission Committee 2020 (MIT DUSP).*

Selected Skills

Programming Languages: Javascript (+10 yrs), Ruby (+10 yrs). Python (+5 yrs), R (+4 yrs)

Data Visualization: Deep knowledge of how to produce meaningful visualization and storytelling.

Web Development: Fluent with open source database and web server including Ruby on Rails, PostgreSQL, MySQL, Nginx and Ubuntu Linux.

GIS, Quantitative and Spatial Analysis: Knowledge of web mapping and open source technology including Mapbox, Open StreetMap, QGIS, PostGIS and Turf.js.

Languages: Korean (Native) and English (Fluent).