

# LIANG CAI

1126 E 59th St, Chicago, IL 60637 | [liangcai@uchicago.edu](mailto:liangcai@uchicago.edu) | +1 (773) 322 0825 | Update: August 2020

## PROFILE

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<b>Research Interest</b>	Crime Geography, Urban, Activity Space, Health Disparities
<b>Skills</b>	Mapping, GIS, and Spatial Analysis Quantitative Methods Computational Methods Social Networks Visualization
<b>Softwares</b>	R, Stata, L <sup>A</sup> T <sub>E</sub> X, Python (in progress), and JavaScript (in progress) ArcGIS, GeoDa, and QGIS
<b>Language</b>	Chinese Mandarin (Native)

## EDUCATION

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<b>The University of Chicago</b> <i>Advisor: Dr. Kate Cagney</i>	Chicago, IL <b>09.2017 - present</b>
<ul style="list-style-type: none"><li>• Ph.D. in Sociology</li><li>• M.A. in Social Sciences</li></ul>	
<b>Utrecht University</b> <i>Advisor: Dr. Stijn Ruiter</i>	Utrecht, The Netherlands <b>05.2017</b>
<ul style="list-style-type: none"><li>• M.Sc. in Sociology and Social Research</li></ul>	
<b>Nanjing University</b> <i>Graduate with Distinction</i>	Nanjing, China <b>06.2015</b>
<ul style="list-style-type: none"><li>• LL.B. in Social Work</li></ul>	

## RESEARCH EXPERIENCE

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<b>Research Assistant</b> to Dr. Kate Cagney on the Chicago Health and Retirement Trajectories Study (CHART) funded by NIA and NSF.	03.2019 - present
<i>National Opinion Research Center (NORC), Chicago IL, USA</i>	
<b>Research Assistant</b> to Dr. Luc Anselin on the GeoDa software.	11.2018 - 04.2019
<i>UChicago Center for Spatial Data Science (CSDS), Chicago IL, USA</i>	
<b>Research Assistant</b> to Dr. Stijn Ruiter on the Crime in Transit Study (CIT).	09.2016 - 03.2017
<i>Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), Amsterdam, NL</i>	

## TEACHING EXPERIENCE

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Autumn, 2020

Introduction to Spatial Data Science (Instructor: Dr. Luc Anselin)

## EMPLOYMENT

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### Vulnerability Mapping using Big Data

*The World Bank, USA*

Consultant | Director: Dr. Audrey Sacks (Senior Social Development Specialist) 08.2018 - 07.2020

Constructed and mapped vulnerability index using publicly-available remote sensing and crowd-sourced big data for under-developed countries in Africa (Senegal and Uganda's refugee settlements), Asia (Armenia, Azerbaijan, Georgia, Pakistan, Tajikistan and Uzbekistan), and Europe (Albania) to inform targeting strategies and policy interventions.

## PUBLICATION & PRESENTATION

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### PEER-REVIEWED ARTICLES

#### *Published*

Cagney, K. A., Cornwell, E. Y., Goldman, A. W., & **Cai, L.** (2020). Urban Mobility and Activity Space. *Annual Review of Sociology*. 46(1), 623-648.

Song, G., Liu, L., He, S., & **Cai, L.** (2020). Safety Perceptions among African Migrants in Guangzhou and Foshan, China. *Cities*. 99, 102624.

#### *Manuscript under Review/in Preparation*

**Cai, L.** & Browning, C. (2020). The Heterogeneous Racial Exposure Contexts of Urban Seniors' Activity Spaces in Chicago: Evidence from the CHART Study. In Preparation

**Cai, L.** (2020). Racial Isolation in Activity Space: A Sequence Analysis Approach. In Preparation

Song, G., Zhang, Y., **Cai, L.**, & Zhu, C. (2020). Residents, Employees or Visitors at Risk? Effects of Three Types of Ambient Population on Theft on Weekdays and Weekends in Beijing. Under Review

Zhang, Y., Song, G., **Cai, L.**, & Zhu, C. (2020). From residential segregation to activity space-based segregation: The effects of local segregation on crime in advantaged and disadvantaged communities. In Preparation.

### REPORTS

Sacks, A., Fuchs, A., Cancho, C., **Cai, L.**, & Sanchez, E. (2019). Big Data and Vulnerability Mapping: Regional Development and Vulnerability in Azerbaijan (Report No. AUS0000762). The World Bank.

Sacks, A., Vemuru, V., **Cai, L.**, Ilukor, J., Michael, M., & Sanchez, E. (2020). Using Big Data to Inform the Response to Vulnerability in Uganda's Settlements and Host Communities. The World Bank.

### CONFERENCE PRESENTATION

**Cai, L. & Ruiter, S. (2017).** Victimization in Context (Oral).

- *4th International Conference on Crime Geography and Crime Analysis (CGCA 2017)*

**Cai, L. (2019).** Active Streets and Crime Revisited: Understanding Crime Opportunities and Monitoring Eyes in the Public Space with Chicago Streets (Oral).

- *Annual Meeting of Environmental Criminology and Crime Analysis (ECCA 2019)*

- *Annual Meeting of American Society of Criminology (ASC 2019)*

**Cai, L. & Browning, C.** The Heterogeneous Exposure Contexts of Urban Seniors' Activity Spaces in Chicago: Early Results from the CHART Study (Oral).

- *Annual Meeting of Population Association of America (PAA 2020)*

## **HONORS AND AWARDS**

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### **The University of Chicago:**

- Urban Doctoral Fellow: Mansueto Institute for Urban Innovation, 2020-2021
- Research Travel Grant: Graduate Council, 2019
- Social Science Fellowship: Department of Sociology, 2019 - 2025
- Social Science Scholarship, 2017 - 2018

### **Utrecht University & Nanjing University:**

- Holland Scholarship, 2015
- National Student Innovation Grant: Chinese Ministry of Education, 2014 - 2015
- University Scholarships, 2012-2015

## **MEMBERSHIP, SERVICES AND EXTRACURRICULAR ACTIVITIES**

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### **Professional Membership:**

- American Sociological Association (ASA)
- American Society of Criminology (ASC)
- Population Association of America (PAA)
- Environmental Criminology and Crime Analysis Working Group (ECCA)

### **Peer Reviewer:**

- Journal of Criminal Justice

**Social Worker** at Nanjing Children's Welfare Institute (2014)