

# Chengbi Liu

Department of Geography and Geoinformation Science

George Mason University

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## EDUCATION

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2016 – 2020 (expected)

George Mason University

Ph.D. in Earth Systems and GeoInformation Science

Advisor: Dr. Sven Fuhrmann

2014 – 2016

The Ohio State University

M.A. in Geography

Advisor: Dr. Daniel Z. Sui.

2010 – 2014

Calvin College

B.A. in Sociology and Geography (Honors)

Advisor: Dr. Jason E. VanHorn

## RESEARCH INTEREST

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augmented reality, volunteered geographic information, location-based social media

## PUBLICATIONS

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### Peer-reviewed Journal Articles:

- **Liu, C.**, Fuhrmann, S. (2020). Analyzing user-generated content and local visual information in augmented reality-based social media. *Transactions in GIS*, 24 (3), 704-718.
- **Liu, C.**, Fuhrmann, S. (2018). Enriching the GIScience research agenda: Fusing augmented reality and location based social networks. *Transactions in GIS*, 22 (3), 775-788.
- **Liu, C.**, Sui, D. (2017). Exploring the spatiotemporal pattern of cyberbullying with Yik Yak. *The Professional Geographer*, 69 (3), 412-423.

### Other Publications:

- **Liu, C.**, Fuhrmann, S. (2019). Mapping User Sentiment in AR-Based Social Media. *US National Report (US National Committee for the International Cartographic Association)*, accessed July 8, 2019, <https://cartogis.org/usnc-ica/us-national-report/>.
- **Liu, C.**, Grevengoed, L., Haugh, M., Koopman, M., Peterson, I., Walters, L. (2014). An Investigation of the Relationship between Deer and Trails in North Ottawa Dunes. *FYRES Report*. Calvin College.  
<https://pdfs.semanticscholar.org/a329/437d7ffd3ef0af5f2ac2940bcdf2147e5f73.pdf>
- VanHorn, J., **Liu, C.**, SooHoo, B. (2013). Plaster Creek Watershed GIS. ArcGIS Web-GIS

Application.

- **Liu, C.,** Helder, B., Kroon, J., Lampen, A., Narukawa, S., Quakenbush, B., Slachter, A. (2012). Kids Hope USA: Research and Evaluation Report.

#### **In Preparation:**

- **Liu, C.,** Fuhrmann, S. Can AR-based LBSN shape human perception of place? A user study of college students.

#### **CONFERENCE PRESENTATION**

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- 2019 **Liu, C.,** Fuhrmann, S. Exploring Relationship Between User-Generated Content and Local Visual Characteristics in AR-based LBSN. *Annual Meeting of Association of American Geographers*. Washington DC
- 2018 **Liu, C.,** Fuhrmann, S. When AR meets LBSN: Fusing augmented reality and location based social networks. *ESRI User Conference 2018*. San Diego, CA.
- 2018 **Liu, C.,** Fuhrmann, S. Enriching the GIScience research agenda: Fusing augmented reality and location based social networks. *Annual Meeting of Association of American Geographers*. New Orleans, LA.
- 2017 **Liu, C.** Crowdsourced mapping in 3D: From sharing to collaboratively building 3D models for online mapping. *The 28th International Cartographic Conference*. Washington DC.
- 2017 **Liu, C.,** Sui, D. Exploring the spatiotemporal pattern of cyberbullying with Yik Yak. *Annual Meeting of Association of American Geographers*. San Francisco, CA.
- 2016 Zhang, L., **Liu, C.,** Li, M. A Big Data-Oriented Dynamic R-tree Forest (DRF) For Spatial Object Query. *George Mason University's GIS Day*. Fairfax, VA. Poster.
- 2014 **Liu, C.,** Grevengoed, L., Haugh, M., Koopman, M., Peterson, I., Walters, L. An Investigation of the Relationship between Deer and Trails in North Ottawa Dunes. *Michigan Academy of Science, Arts and Letters*. Oakland, MI. Poster.
- 2013 VanHorn, J., **Liu, C.,** SooHoo, B. Creating a Web Application for Plaster Creek Watershed. *West Michigan Regional Undergraduate Regional Science Research Conference*. Grand Rapids, MI. Poster.

#### **RESEARCH EXPERIENCE**

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- 2016-2018 Research Assistant, Department of Geography and Geoinformation Science, George Mason University
- 2014-2015 Research Assistant, Department of Geography, The Ohio State University
- Summer 2013 Plaster Creek Steward Research Assistant, Department of Geography, Calvin College
- 2012-2013 Research Assistant, Office of Admissions & Financial Aid, Calvin College
- Spring 2012 Research team member of the Kids Hope mentoring program, Zeeland, MI

#### **TEACHING EXPERIENCE**

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Instructor:

- Social Media Analysis (online), George Mason University, 2020

- Introduction to Geoinformation Technologies (online), George Mason University, 2019-2020

Teaching assistant:

- Quantitative Methods, George Mason University, 2018-2019
- Quantitative Methods for Geographical Analysis, George Mason University, 2018-2019
- Global Environmental Hazards, George Mason University, 2018
- Fundamentals of GIS, The Ohio State University, 2015-2016

Student mentor:

- FYRES (First-year Research in Earth Science) mentor, Calvin College, 2013-2014

## **AWARDS AND HONORS**

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2019	Provost Summer Research Fellowship, George Mason University (\$7,000)
2019	Graduate Student Travel Fund, George Mason University (\$150)
2017	International Cartographic Conference Travel Award (\$1,000)
2016-2018	Provost PhD Program Award, George Mason University
2014-2016	Graduate Research & Teaching Assistantship, The Ohio State University
2013-2014	Theodore A. Rottman Scholarship in Social Justice, Calvin College (\$1,650)
2013	The Bosscher Family Interim Scholarship Calvin College (\$500)
2010-2014	Dean's Scholarship for Academic Excellence, Calvin College (\$6,000/yr)

## **PROFESSIONAL AFFILIATIONS**

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Member, American Association of Geographers

## **OTHER EXPERIENCE**

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2015	President, International Friendships Student Organization, The Ohio State University
2013	Member, Honors Council, Calvin College
2012	Co-founder & President, Chinese Students Association, Calvin College

## **SKILLS**

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- Selected Software: ArcGIS, R, QGIS, GeoDa, MATLAB, SPSS, Gephi, Unity 3d
- Programming Language: Python, Javascript (leaflet), HTML, C#
- Other Skills: English/Chinese translation

## **LANGUAGE**

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- English: Full professional proficiency
- Chinese: Native