# JING LIU Curriculum Vitae

Notarization. I have read the following and certify that this curriculum vitae is a current and accurate statement of my professional record.

Signature

Date

## PERSONAL INFORMATION

## **Contact Information**

Name:	Liu, Jing
Work:	2203 Benjamin Building, University of Maryland, MD 20740
Email:	jliu28@umd.edu
Website:	https://education.umd.edu/directory/jing-liu

# Academic Appointments at University of Maryland College Park (UMD)

Assistant Professor in Education Policy, University of Maryland College Park 2020-Present

# **Educational Background**

Ph.D., Economics of Education, Stanford University	2018
M.A., Economics, Stanford University	2016
M.A., Economics of Education, Peking University, China	2013
B.A., Economics, Peking University, China	2011

## Other Employment and Affiliation

Faculty Associate, Maryland Population Research Center	2023-Present
Steering Committee, Maryland Equity Project, UMD	2020-Present
Board Member, Baltimore Education Research Consortium	2021-Present
Research Advisory Board Member, DC Education Research Collaborative	2021-Present
Research Affiliate, IZA Institute of Labor Economics	2021-Present
Principal Investigator, Maryland Longitudinal Data System Center	2020-Present
Postdoctoral Research Associate, Annenberg Institute, Brown University	2018-2020
Visiting Professor, Annenberg Institute, Brown University	2020-2022

#### <u>Refereed Journals</u>

#### Refereed Journal Articles

15. Liu, J., Penner, E., Gao, W. (Forthcoming), "Troublemakers? The Role of Frequent Teacher Referrers in Expanding Racial Disciplinary Disproportionalities". Educational Researcher

\* Press coverage: AERA Communications, EducationWeek

- Demszky, D., Liu, J., Hill, H., Jurafsky, D., Piech, C. (Forthcoming), "Can Automated Feedback Improve Teachers' Uptake of Student Ideas? Evidence from a Randomized Controlled Trial in a Large-Scale Online Course". *Educational Evaluation and Policy Analysis* \* Press coverage: Stanford News
- 13. Liu, J., Hayes, M., Gershenson, S. (Forthcoming), "From Referrals to Suspensions: New Evidence on Racial Disparities in Exclusionary Discipline". Journal of Urban Economics.
- 12. Hayes, M., Liu, J., Gershenson, S. (2023), "Who Refers Whom? The Effects of Teacher Characteristics on Disciplinary Office Referrals". *Economics of Eduation Review*, 102376
- Liu, J., Loeb, S., & Shi, Y. (2022), "More Than Shortages: The Unequal Distribution of Substitute Teaching". *Education Finance and Policy*, 17(2), 285–308.
   \*Press coverage: Fordham Institute, NBC News, National Council on Teacher Quality
- Liu, J. & Cohen, J. (2021), "Measuring Teaching Practices at Scale: A Novel Application of Text-as-Data Methods". *Educational Evaluation and Policy Analysis*, 43(4), 587-614.
   \*Press coverage: Fordham Institute
- 9. <u>Liu, J., Lee, M., & Gershenson, S. (2021)</u>, "The Short- and Long-Run Impacts of Secondary School Absences". *Journal of Public Economics*, 199, 104441.
- Liu, J. & Loeb, S. (2021), "Engaging Teachers: Measuring Teacher's Impact on Student Attendance in Secondary School". Journal of Human Resources, 56(2), 343-379. [Lead Article].
   \*Press coverage: Chalkbeat, FutureEd, EducationDive, National Council on Teacher Quality
- Kuhfeld, M., Soland J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J.. (2020), Projecting the Potential Impacts of COVID-19 School Closures on Academic Achievement". *Educational Researcher*, 49(8), 549-565.
   \*Press coverage: New York Times
- Sun, M., <u>Liu, J.</u>, Zhu, JM., LeClair, Z. (2019), "Using a Text-as-Data Approach to Understand Reform Processes: A Deep Exploration of School Improvement Strategies". *Educational Evaluation and Policy Analysis*, 41(4), 510-536.

- 5. Penner, E., Rochmes, J., <u>Liu</u>, J., Solanki, S., Loeb, S. (2019), "Differing View of Equity: How Prospective Educators Perceive Their Role in Closing Achievement Gaps". *RSF: The Russell Sage Foundation Journal of Social Sciences*, 5(3), 103-127.
- 4. Bo, S., <u>Liu, J.</u>, Shiu, J., Song, Y., Zhou, S. (2019), "Admission Mechanisms and Mismatches between Colleges and Students: Evidence from A Large Administrative Dataset from China". *Economics of Education Review*, 68, 27-37.
- Whitney, C. R. & Liu, J. (2017), "What We're Missing: A Descriptive Analysis of Part-Day Absenteeism in Secondary School", AERA Open, 3(2).
   \*Press coverage: Education Week, Stanford Report
- Bettinger, E., Liu, J., Loeb, S. (2016), "Connections Matter: How Interactive Peers Affect Students in Online College Courses", *Journal of Policy Analysis and Management* (Big Data Special Section), 35(4), 932-954.
- Liu, J. & Yuan, C., (2012), "Did Value-Added Tax Reform Change Enterprise's Employment? Evidence from the Value-Added Tax Reform in Northeastern China", *Economic Science* (in Chinese), 1, 103-114.

#### Refereed Conference Proceedings & Policy Reports

- 4. Demszky, D. & Liu, J., (2023), "M-Powering Teachers: Natural Language Processing Powered Feedback Improves 1:1 Instruction and Student Outcomes", *Proceedings of the Tenth ACM Conference on Learning @ Scale.*
- Alic III, S., Demszky, D., Mancenido, Z., Liu, J., Hill, H., & Jurafsky, D. (2022), "Computationally Identifying Funneling and Focusing Questions in Classroom Discourse", Proceedings of the 17th Workshop on Innovative Use of NLP for Building Educational Applications (BEA), pp. 224–233.
- Liu, J., (2022) "Imperfect Attendance: Toward A Fairer Measure of Student Absenteeism", Washington D.C.: Thomas B. Fordham Institute.
   \*Press coverage: K-12Dive, The 74 Million
- Demszky, D., <u>Liu, J.</u>, Cohen, J., Hill, H., Mancenido, Z., Jurafsky, D., & Hashimoto, T. (2021), "Measuring Conversational Uptake: A Case Study on Student-Teacher Interactions", *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics (ACL).*

#### Conferences, Workshops, and Talks

 $Invited \ Talks$ 

Notes: Invited talks are grouped by paper/analysis.

- 5. Liu, J., Hayes, M., Gershenson, S., "From Referrals to Suspensions: New Evidence on Racial Disparities in Exclusionary Discipline".
  \* Paper presented at the seminar series by UMD's School of Public Health (2022, December)
  \* Paper presented at the seminar series by George Mason University's EdPolicyForward (2021, December)
- 4. <u>Liu, J.</u>, (2022) "Imperfect Attendance: Toward A Fairer Measure of Student Absenteeism". \* Paper presented at the Network to Advance State Attendance Policy and Practice Meeting (2022, December)
- 3. Demszky, D., Liu, J., Hill, H., Jurafsky, D., Piech, C., "Can Automated Feedback Improve Teachers' Uptake of Student Ideas? Evidence from a Randomized Controlled Trial in a Large-Scale Online Course".
  \* Paper presented at the seminar series by UMD's Computational Linguistics and Information Processing. UMD (2022, February)
  \* Paper presented at the seminar series by the University of Osla, Online (2021, December)

\* Paper presented at the seminar series by the University of Oslo. Online (2021, December)

 Kuhfeld, M., Soland J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020), Projecting the Potential Impacts of COVID-19 School Closures on Academic Achievement".
 \*Paper presented at University System of Maryland Board of Regents Meeting, Online (2020, December)

\*Paper presented at the Maryland Longitudinal Data System Center, Online (2020, December)

\*Paper presented at the Shanghai International Studies University, Online (2021, April)

1. <u>Liu, J.</u> & Loeb, S. (2021), "Engaging Teachers: Measuring Teacher's Impact on Student Attendance in Secondary School".

\* Paper presented at UMD's College of Education, College Park, MD (2020, November)

\* Paper presented at University of Connecticut's Department of Public Policy, Hartford, CT (2020, March).

\* Paper presented at the Northwest Evalation Association (NWEA). Portland, OR (2020, September).

\* Paper presented at University of California at Irvine's School of Education, Irvine, CA (2019, November)

\* Paper presented at Brown University's Walton School of International and Public Affairs, Providence, RI (2019, November)

## Refereed Presentations

Notes: Presentations are grouped by paper/analysis—rather than by conference—as some have been presented to multiple audiences, with updated analyses or findings between each. Only those papers presented by J. Liu or by a graduate student (in close collaboration with J. Liu) are included.

- Liu, J., Penner, E., Gao, W., "Troublemakers? The Role of Frequent Teacher Referrers in Expanding Racial Disciplinary Disproportionalities".
   \* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. (2022, November).
- 7. Liu, J., Hayes, M., Gershenson, S., "From Referrals to Suspensions: New Evidence on Racial Disparities in Exclusionary Discipline".
   \* Paper presented at the Society of Labor Economists Annual Conference. Online. (2021, May)
- 6. <u>Liu, J.</u>, Lee, M., "Beyond Chronic Absenteeism: The Dynamics and Disparities of Class-Absences in Secondary School".
  \* Paper presented at the annual conference of the Association for Education Finance and Policy. Kansas City, MO (2019, March).
- 5. <u>Liu, J.</u> & Cohen, J., "Measuring Teaching Practices at Scale: A Novel Application of Text-as-Data Methods".
  \* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Chicago, IL (2017, November).
- 4. Liu, J., Loeb, S., & Shi, Y. (2022), "More Than Shortages: The Unequal Distribution of Substitute Teaching".
  \* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Washington D.C. (2018, November).
  \*Paper presented at the Society for Research on Educational Effectiveness Annual Conference, Washington D.C.,(2017, March).
- Liu, J., Kulfeld, M., Lee, M., Song, D., "Noncognitive Factors and Student Long-Run Success: Comparing the Predictive Validity of Observable Academic Behaviors and Social Emotional Skills".
   \* Paper presented at the Society for Research on Educational Effectiveness Annual Conference. Online. (2021).
   \* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Online. (2021, November).
- Liu, J. & Loeb, S. (2021), "Engaging Teachers: Measuring Teacher's Impact on Student Attendance in Secondary School".
   \* Paper presented at the annual conference of the Association for Education Finance and Policy. Chicago, IL (2017, November).

\* Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Denver, CO. (2016, November).

Bettinger, E., <u>Liu</u>, J., Loeb, S., "Connections Matter: How Interactive Peers Affect Students in Online College Courses".
 \*Paper presented at the Association for Public Policy Analysis and Management Annual Fall Research Conference. Miami, Florida (2015, November).
 \*Paper presented at the GESIS Computational Social Science Winter Symposium. Cologne, Germany (2016, December)

#### **Professional and Extension Publications**

#### Pre-print/Working Papers

- 3. Blazar, D., Conrad, C., & Liu, J., "Computer Science for All? The Impact of Access to CS Courses on Student Short- and Long-Run Outcomes".
- Liu, J., Lee, M., "Beyond Chronic Absenteeism: The Dynamics and Disparities of Class-Absences in Secondary School". (*under review*) \*Press coverage: The 74 Million, Chalkbeat
- 1. <u>Liu, J.</u>, Kulfeld, M., Lee, M., Song, D., "Noncognitive Factors and Student Long-Run Success: Comparing the Predictive Validity of Observable Academic Behaviors and Social Emotional Skills". (*revise & resubmit in Educational Policy*)

#### Policy Briefs/Op-eds

- 6. Liu, J. (2023), Disciplinary Referrals, Teachers, and The Sources of Racial Disciplinary Disproportionalities, *Brookings Brown Center Chalkboard*, January 30, 2023
- 5. <u>Liu, J.</u> and Cohen, J. (2021), Natural Language Processing May Provide A New Perspective on Effective Teaching, *Brookings Brown Center Chalkboard*, May 17, 2021
- 4. Liu, J. (2020), "America Faces A Substitute Teacher Shortage—and Disadvantaged Schools Are Hit Hardest", Brookings Brown Center Chalkboard, October 21, 2020.
- Kuhfeld, M., Soland J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020), "The Impact of COVID 19 on Student Achievement and What It May Mean for Educators", *Brookings Brown Center Chalkboard*, May 27, 2020.
- 2. <u>Liu, J.</u> (2017), "It's Time to Ask Why Postsecondary Online Learning Is Not Working Well", *Inside Higher Ed*, June 21, 2017.

1. <u>Liu, J.</u> & Loeb, S. (2016), "Going to School Is Optional: Schools Need to Engage Students to Increase Their Lifetime Opportunities", *Brookings Evidence Speaks Series*, October 27, 2016.

## Sponsored Research and Programs

### Grants

- 7. Co-Principal Investigator. "Integration of Computer-Assisted Methods and Human Interactions to Understand Lesson Plan Quality and Teaching to Advance Middle-Grade Mathematics Instruction," the National Science Foundation with Principal Investigator Min Sun and Co-Principal Investigators Wei Ai, Melissa Boston, and Lorraine Males (\$1,499,989; 2023-2027)
- 6. *Principal Investigator.* "M-Powering Teachers II: A Machine Learning Tool for Mathematics Instruction Measurement and Feedback," the Melinda & Bill Gates Foundation with Co-Principal Investigators Heather Hill and Dora Demszky (\$400,000; 2023-2025)
- 5. *Principal Investigator*. "M-Powering Teachers: A Machine Learning Tool for Mathematics Instruction Measurement and Feedback," the Learning Agency with Co-Principal Investigators Heather Hill and Dora Demszky (\$249,978; 2022-2024)
- 4. *Consultant.* "NEXUS: Nurturing EXcellence for Undergraduate Success", the Abell Foundation (\$19,773 to UMD; 2022-2023)
- 3. *Principal Investigator*. "Imperfect Attendance: Toward A Fairer Measure of Student Absenteeis", the Fordham Institute (\$37,500; 2021-2022)
- 2. *Principal Investigator.* "The Impact of School Quality on Student Educational Attainment and Labor Market," Maryland Longitudinal Data System Center (\$10,000; 2021-2023)
- 1. *Principal Investigator*. "The Short- and Long-Run Impacts of Secondary School Absence," the Spencer Foundation with Co-Principal Investigator Seth Gershenson (\$50,000, 2019-2020)

#### Internal University Grants

- 5. *Principal Investigator.* "M-Powering Teachers: Using Machine Learning to Measure and Improve Equity in K-12 Mathematics Classrooms," Grand Challenge Grants Program, Team Project, University of Maryland, with Co-Principal Investigators Wei Ai and Carol Espy-Wilson (\$1,048,518; 2023-2025)
- 4. *Principal Investigator.* "Unpacking the Origins of Racial Disparities in Exclusionary Discipline A Descriptive Analysis of the Referral Process", Faculty-Student Research Award (FSRA), University of Maryland (\$10,000; 2022-2023)

- 3. Support Program for Advancing Research and Collaboration (SPARC) New Assistant Professor Award, College of Education, University of Maryland (\$15,000; 2021-2022)
- 2. Dissertation Support Grant, Stanford Graduate School of Education (\$6,000; 2017-2018)
- 1. Dissertation Grant, Stanford Freeman Spogli Institute (\$15,000; 2017-2018)

#### Research Fellowships, Prizes and Awards

- 12. Winner, the Future of K-12 Education Data Design Challenge, US Chamber of Commerce Foundation (\$30,000; 2023)
- 11. Honoree, Maryland Research Excellence Celebration (2023)
- 10. EdResearch for Action Writing Fellows, Results for America & Annenberg Institute, Brown University (2023-2024)
- 9. Emerging Education Policy Scholar, the Thomas B. Fordham Institute and the American Enterprise Institute (2019-2020)
- 8. National Academy of Education/Spencer Dissertation Fellowship (\$27,500; 2017-2018)
- 7. Shultz Graduate Student Fellowship in Economic Policy, Stanford Institute for Economic Policy Research (\$17,500; 2017-2018)
- 6. Technology for Equity in Learning Opportunities Award, Stanford Graduate School of Education (\$7,500; 2017-2018)
- 5. The Karr Family Fellowship, Stanford Center for Education Policy Analysis (2014-2015)
- 4. The I. James and Viola Quillen Fellowship, Stanford Graduate School of Education (2013-2014)
- 3. Best Paper Award, Deloitte Tax Championship, China (\$1,000; 2011)
- 2. Outstanding Graduate, Department of Public Finance, Peking University (2011)
- 1. Excellent Graduate Thesis, Department of Public Finance, Peking University (2011)

#### TEACHING, EXTENSION, MENTORING, AND ADVISING

#### **Courses Taught**

- 6. TLPL788M: Research and Writing for Publication (1 credit, 1 per semester); taught once, 2021-current; approx. 14 students/class.
- 5. TLPL 670/PLCY 688B: Economics of Education (3 credits, 1 per semester); tagut once, 2022-2023; approx. 14 students/class.
- 4. TLPL 788D: Data Management for Social Science Research (1 credit, 1 per semester); taught once; 2021-2022; approx. 7 students/class
- 3. TLPL 765: Quantitative Analysis of Education Policy Analysis (3 credits, 1 per semester); taught three times, 2020-present; approx. 10 students/class.
- 2. TLPL 788X: Policy Analysis of the Education Workforce (3 credits, 1 per semester); taught twice, 2020-2022; approx. 7 students/class.
- 1. Annenberg Undergraduate Fellowship in Education and Social Policy (Brown University), 2019; 9 students; Program Designer and Instructor

# Teaching Innovations

## Course Developed

- 3. TLPL788M: Research and Writing for Publication
- 2. TLPL 765: Quantitative Analysis of Education Policy Analysis
- 1. TLPL 788X: Policy Analysis of the Education Workforce

### Program Development

- 2. TLPL Doctoral Seminar: Designed a one credit course offered each semester for doctoral students to practice presentations, share research ideas, and attend research talks by external speakers (2021-present)
- 1. TLPL Quantitative Research Methods: Collaborate with two colleagues to revise requirements and build four-course sequence (2020 – present)

## Advising: Research or Clinical

## Master's

1. Ariel Rivers (MA advisor; Education Policy; expected graduation summer 2023)

#### Doctoral: Advisor

- 5. Matthew McCrea (PhD advisor; Education Policy; 2022 present)
- 4. Max Anthenelli (PhD advisor; Education Policy; 2022 present)
- 3. Youngsun Lee (PhD advisor; Education Policy; 2022 present)
- 2. Ting-Yu Chung (PhD advisor; Education Policy; 2021 present)
- 1. Wenjing Gao (PhD advisor; Education Policy; 2021 present)

#### Doctoral: Dissertation Committee Member

- 2. Francisco Lagos Marin (PhD committee; Education Policy; graduated 2022)
- 1. Robert Reed Senter (PhD committee; Special Education; graduated 2022)

# SERVICE AND OUTREACH

## **Reviewing Activities for Journals and Presses**

- AERA Open
- American Education Research Journal
- Child Development
- Developmental Psychology
- Economic Inquiry
- Economics of Education Review
- Education Researcher
- Educational Evaluation and Policy Analysis
- The Elementary School Journal
- Journal of Labor Economics
- Journal of Public Economics
- Journal of Research on Educational Effectiveness
- Journal of Policy Analysis and Management
- Journal of Economic Behavior and Organization
- The High School Journal

## Committees, Professional and Campus Service

#### Campus Service - Department

1. Member, Faculty Search Committee: Education Policy	2022 - 2023		
Campus Service – College			
<ol> <li>Member, Review Committee for Research-Practice Partnership COE Grant</li> <li>Member, Search Committee for Grant Writer in the College's Research Office</li> <li>Member, College Senate</li> </ol>	2021-2022 2022–2023 2021-2023		
Leadership Roles in Conferences and Professional Organizations			

2. Founding Member, Chinese Education Finance and Policy Association2020-present1. Member, Program Committee for the Society of Labor Economists Annual2022-2023Conference2022-2023