# **Serina Chang**

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2019-present

Stanford University, Stanford, CA

Ph.D. candidate, Computer Science

**EDUCATION** 

	Advised by Prof. Jure Leskovec and Prof. Johan Ugander		
	Columbia University, New York, NY	2015-2019	
	B.A., Computer Science, concentration in Sociology, magna cum laude		
	Advised by Prof. Kathleen McKeown		
	GPA: 3.97/4.00, Dean's List (all semesters)		
HONORS	Outstanding Undergraduate Researcher Award, Computing Research Association	n 2019	
	Graduate Research Fellowship, National Science Foundation	2019	
	The Finch Family Fellowship, Stanford University, School of Engineering	2019	
	Phi Beta Kappa, Columbia University  Theodore B. Borbless Associated Columbia University Computer Science	2019	
	<b>Theodore R. Bashkow Award</b> , Columbia University, Computer Science <b>Academic Excellence Award</b> , Columbia University, Computer Science	2019 2019	
	Collegiate Award Finalist, National Center for Women and Information Technology		
	King's Crown Leadership Award, Innovation and Enhancement, Columbia Univ		
DUDI ICATIONS	*indicates as first outhouship		
PUBLICATIONS	*indicates co-first authorship. [1] <b>Serina Chang</b> *, Emma Pierson*, Pang Wei Koh*, Jaline Gerardin, Beth Redbin	rd. David Grusky, and	
	Jure Leskovec. Mobility network models of COVID-19 explain inequities a		
	Nature, 2020. Also presented at Networks 2021 (oral) and NeurIPS 2020 ML	<u> </u>	
	Coverage in 300+ news outlets, including The New York Times, The Washing		
	CNN, Fox Business, Wired, NPR, The Telegraph, MIT Technology Review, and		
	[2] Serina Chang and Kathleen McKeown. Automatically inferring gender associ EMNLP 2019 (short paper). Oral presentation.	ations from language.	
	[3] <b>Serina Chang</b> , Ruiqi Zhong, Ethan Adams, Fei-Tzin Lee, Siddharth Varia, Desi		
	Frey, Chris Kedzie, and Kathleen McKeown. Detecting gang-involved escale	ation on social media	
	using context. EMNLP 2018 (long paper). Oral presentation.		
	[4] Jessica Ouyang, <b>Serina Chang</b> , and Kathleen McKeown. Crowd-sourced item narrative summarization corpora. EACL 2017 (short paper). Oral presentation		
WORKING PAPERS	Serina Chang and Johan Ugander. To recommend or not? A model-based comparison of item-matching processes. 2021. Also presented at IC2S2 2021 (oral).		
	[2] <b>Serina Chang</b> , Mandy L. Wilson, Bryan Lewis, Zakaria Mehrab, Komal	=	
	Pierson, Pang Wei Koh, Jaline Gerardin, Beth Redbird, David Grusky, Madh		
	Leskovec. Supporting COVID-19 policy response with large-scale mobility-based and the Mark Court of the Court		
	[3] Kyle Kawagoe*, Mark Rychnovsky*, <b>Serina Chang</b> , Greg Huber, Lucy M. Reuven Pnini, Boris Veytsman, and David Yllanes. How much do superspread dynamics in inhomogeneous populations. 2021.		
	[4] <b>Serina Chang</b> . Disentangling word association in distributional semantics wit	th WordNet. 2019.	
TEACHING 0	Deceased mentary Stanford University	2020 procent	
TEACHING & MENTORSHIP	Research mentor, Stanford University  2020-present  Mentoring 3 students in Prof. Leskovec's lab on research projects related to COVID-19 modeling and mobility		
	Mentor, Stanford Computer Science, Undergraduate Mentoring Program ■ Mentoring an undergraduate student in Computer Science on research, classes, and career paths	2020-present	
	<ul> <li>Instructor, Girls Who Code, Summer Immersion Program</li> <li>Served as the primary teacher for a classroom of 20 high school girls</li> <li>Taught a 7-week curriculum including Python, HTML, CSS, JavaScript, and Arduino</li> </ul>		
	Workshop organizer, NYC Digital Humanities Week	2019	
	TOTAGE OF GUILLOCT, ITTO DISIGN HUMBHING WEEK	2013	

- "Beyond Bechdel: Using Computation to Analyze Gender in Film," co-organized and co-taught with Kara Schechtman
- Introduced techniques in natural language processing and data science to analyze movies; provided sample code and data

Instructional assistant, Columbia University, Data Structures in Java (COMS 3134)	2017
<ul> <li>Led discussion sections, held weekly office hours, and graded assignments and exams</li> </ul>	

**Peer tutor**, Columbia University, Computer Science Theory (COMS 3261)

## WORK EXPERIENCE

## Software Engineering Intern, Google, Geo Assistant

2018

2017

- Built a new, user-facing feature for Google Search and Assistant
- Implemented backend to parse queries in Search and optimize accuracy in the feature's triggering patterns
- Worked with UX designer and PM to create frontend for the feature

# **Engineering Practicum Intern**, Google, Search Site Reliability Engineering (SRE) 2017

■ Improved internal tools for monitoring and tracking requests to Google Now

## INVITED TALKS

OECD-ODISSEI Webinar on Open Data Infrastructure	2021
Stanford University, Networks (MS&E 135)	2021
Harvard-BCH Machine Learning Club	2021
Stanford San Diego Alumni Club, Speaker Event	
NeurIPS, COVID-19 Symposium	2020
AI Science Spotlight Series	2020
Placekey Community Seminar	
Stanford University, Stats ML Retreat	
Columbia University, NLP Seminar	
Columbia University, Emerging Scholars Program (COMS 1404)	

#### SERVICE

#### **Journal reviewer** for:

- American Journal of Sociology
- ACM Transactions on Spatial Algorithms and Systems

## **Conference reviewer** for:

- ACL 2021, NLP for Social Good Theme
- ACL 2021, NLP for Positive Impact Workshop
- ICLR 2021, AI for Public Health Workshop

# LEADERSHIP

### Lean In at Columbia, Columbia University

2016-2019

- Co-President (2017-2018); Senior Advisor (2018-2019)
- Grew active membership by 5x to reach over 100 committed members attending weekly meetings
- Founded a mentorship program that connected over 70 student-mentor pairs
- Organized the first Lean In at CU conference, sponsored by Microsoft, Facebook, IBM, and others

### Womxn in CS (WiCS), Columbia University

2016-2019

- Academic Chair (2016-2019)
- Founded WiCS Lightning Talks, a series for student researchers to share their research with student audiences
- Organized panels with faculty and mentorship events with upperclassmen to help students navigate academics in CS

# Intercollegiate Chamber Music Festival (ICMF), NYC

2017-2019

- Co-founded and co-produced with Cindy Liu and Dean Deng, in collaboration with the Chamber Music Society of Lincoln Center; the festival has just finished its fourth successful year
- ICMF is an annual, weekend-long music festival for collegiate chamber musicians; events include a performers' showcase at Lincoln Center, masterclasses with world-renowned artists, and talks with industry leaders

## **ACTIVITIES**

# Music Performance Program (MPP), Columbia University

2015-2019

- Took lessons in chamber music and piano
- Selected 3 times to perform in MPP's end-of-year concert at Carnegie Weill Hall

# Precollege Program, Manhattan School of Music (MSM)

2003-2015

- Took lessons in piano, violin, chamber music, orchestra, music theory, and ear training
- Recipient of the Rosetta Goodkind Scholarship and the Ralph Zola Scholarship
- Multi-time winner of MSM's concerto and chamber music competitions
- Featured on NPR's From The Top; recipient of the National YoungArts Merit Award; winner of international piano competitions including American Protégé, American Fine Arts Festival, and New York International Artists Association