# **Serina Chang**

serinac@stanford.edu • +1 (646) 300-1686

Stanford University, Stanford, CA

Ph.D. candidate in Computer Science (CS)

|                            | 1 ,   |                |
|----------------------------|---|----------------|
|                            | Columbia University, New York, NY   | 2015 - 2019    |
|                            | B.A., magna cum laude, Dean's List (all semesters)  | GPA: 3.97/4.00 |
|                            | Computer Science, concentration in Sociology  |                |
|                            | •   |                |
| HONORS                     | Outstanding Undergraduate Researcher Award, Computing Research Association  | 2019           |
|                            | Graduate Research Fellowship, National Science Foundation   | 2019           |
|                            | The Finch Family Fellowship, Stanford University, School of Engineering   | 2019           |
|                            | Theodore R. Bashkow Award, Columbia University  | 2019           |
|                            | Phi Beta Kappa, Columbia University   | 2019           |
|                            | Computer Science Academic Excellence Award, Columbia University   | 2019           |
|                            | Collegiate Award Finalist, National Center for Women and Information Technology   | 2018           |
|                            | King's Crown Leadership Award, Innovation and Enhancement, Columbia University  | y 2018         |
| PUBLICATIONS               | [1] <b>Serina Chang</b> and Kathleen McKeown. "Automatically Inferring Gender Associations from Language." <i>Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing</i> (EMNLP-IJCNLP), 2019. Oral presentation. |                |
|                            | [2] Serina Chang, Ruiqi Zhong, Ethan Adams, Fei-Tzin Lee, Siddharth Varia, Desmond<br>Frey, Chris Kedzie, and Kathleen McKeown. "Detecting Gang-Involved Escalation<br>Using Context." EMNLP-IJCNLP, 2018. Oral presentation.   |                |
|                            | [3] Jessica Ouyang, <b>Serina Chang</b> , and Kathleen McKeown. "Crowd-Sourced Iterative Annotation for Narrative Summarization Corpora." <i>Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics</i> (EACL), 2017. Oral presentation.                               |                |
| PROFESSIONAL<br>EXPERIENCE | <ul> <li>Research Assistant, Columbia University</li> <li>Conducted research in natural language processing (NLP) with Kathleen McKeown and Smaranda M</li> <li>Project areas included computational social science, automatic summarization, and argumentation m</li> </ul>  |                |
|                            | <b>Software Engineering Intern</b> , Google, Geo Assistant  Built a new, user-facing feature for Google Search and Assistant  | Summer 2018    |

- 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)

Improved internal tools for monitoring and tracking requests to Google Now

**TEACHING EXPERIENCE** 

**EDUCATION** 

### Instructor, Girls Who Code, Summer Immersion Program

Summer 2019

Summer 2017

2019 - Present

- Served as the primary teacher for a classroom of 20 high school girls ■ Taught a 7-week curriculum including Python, HTML, CSS, JavaScript, and Arduino

# Workshop Organizer, NYC Digital Humanities Week

Spring 2019

- "Beyond Bechdel: Using Computation to Analyze Gender in Film," co-organized and co-taught with Kara Schechtman
- Explored computational methods of analyzing movies, covering techniques in NLP, machine learning, and data science
- Prepared starter code, data, and introductory exercises for attendees to try out during the workshop

# **Guest Lecturer**, Columbia University, Emerging Scholars Program (ESP)

Spring & Fall 2018

- Invited to speak for ESP, a course for introductory students in CS
- Present multiple research talks; maintained mentoring relationships afterwards with several students

## Instructional Assistant, Columbia University, Data Structures in Java

Spring & Fall 2017

- Assisted Prof. Paul Blaer in teaching an undergraduate class of over 200 students
- Led discussion sections, held weekly office hours, and graded assignments and exams

**Peer Tutor**, Columbia University, Computer Science Theory

Spring 2017

#### **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 students to young professionals in the city
- 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 (2017-2019), 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 that celebrates the talent and passion of collegiate chamber musicians
- Events include a performers' showcase at Lincoln Center, masterclasses with world-renowned artists, and visionary talks with industry leaders

#### **SKILLS**

Languages: English, Chinese Mandarin

Programming languages (proficient): Java, Python, HTML, CSS, JavaScript, BASH

**Programming languages** (familiar): C, C++, Arduino, R

Tools: Git, LATEX, Amazon Mechanical Turk development, Google Cloud virtual machines

Classical music: piano, violin, choir [YouTube]

#### REFERENCES

## Dr. Kathleen McKeown

Henry and Gertrude Rothschild Professor of Computer Science, Columbia University

Founding Director of Columbia's Data Science Institute

kathy@cs.columbia.edu

Relationship: Research Advisor

# Dr. Julia Hirschberg

Percy K. and Vida L. W. Hudson Professor of Computer Science, Columbia University

Department Chair (2012-2018)

julia@cs.columbia.edu

Relationship: Mentor and Department Chair