

Sneha Narayan

2240 Campus Dr, Room 2-413, Evanston IL 60626

Phone: (224) 250-1305 E-Mail: snehanarayan@u.northwestern.edu

www.snehanarayan.com

Education

Northwestern University

Expected 2018

PhD in Technology and Social Behavior (joint degree in Computer Science and Communication)

Dissertation: Three Studies on Newcomer Socialization in Distributed Volunteer Communities

Committee: Aaron Shaw (Chair), Benjamin Mako Hill, Darren Gergle, Anne-Marie Piper

Central European University

2011

MA in Sociology and Social Anthropology

Thesis: Making it in the mathematical community: The case of women mathematicians in Hungary

Oberlin College

2010

BA in Mathematics (Honors), minor in Sociology

Thesis: Algebraic Methods in Graph Theory and Their Use in Graph Coloring

Teaching and Mentoring

Instructor

- *Computing Everywhere – Networked Search* 2017

Developed and taught two two-hour workshops on the problem of informational retrieval and advances in search algorithms, as part of a module aimed at improving computational literacy among communication studies undergraduates. Demonstrated concepts such as preferential attachment and the PageRank algorithm using NetLogo, an educational simulation program.

Mentorship and Collaboration

- *Digital Media Module Fellowship* 2015-16

Received a fellowship to assist in developing and running the Digital Media module within the undergraduate Communication Studies major. Through this program, I mentored 11 undergraduate students as they worked on their senior capstone papers, and helped them synthesize their work for the module into coherent, scholarly narratives.

- *Research Collaboration* Summer 2017-present

Co-mentoring a first year graduate student through collaboration on an ongoing project studying the effect of communication design on newcomer retention in wikis.

Teaching Assistant

- *Online Communities and Crowds* 2013 and 2014
Assisted in teaching an undergraduate class on online communities and crowd work, taught by Aaron Shaw. Developed assignments and classroom activities that still remain a part of the curriculum, led a lab section where students worked collaboratively on Wikipedia articles, mentored students working on their final projects, and prepared and taught two lectures.
- *Social Network Analysis* 2014
Assisted in teaching a class of 60 students (consisting of both industrial engineering and communication studies majors) introductory topics in social network analysis. Created lecture slides, developed and graded assignments and exams, demonstrated software in class, and helped students learn how to use R for network analysis.
- *Theories of Argumentation* 2014
Led weekly discussion sections in a class aimed at helping undergraduates develop rigorous argumentation skills.
- *Hampshire College Summer Studies in Mathematics* Summer 2008
Taught gifted high school students advanced topics in mathematics. Developed and taught a mini-course on non-Euclidean geometry.

Curriculum Development

- *Critical Questions in Internet and Society - Qualifying Exam* 2015
Created a syllabus for an advanced undergraduate survey course examining how policy, markets, and society shape and affect the design and experience of online environments.

Guest Lecturer

- *Online Communities and Crowds* 2016
Invited lecture on Remixing Communities in a course taught by Aaron Shaw

Training and Professional Development

- *Graduate Teaching Certificate Program* 2016-2017
Developed course materials, attended seminars on pedagogy, and provided and received feedback on classroom teaching through a year-long training program for graduate students and post-doctorates conducted by the Searle Center for Advancing Learning and Teaching at Northwestern University.
- *Evaluating Student Writing: Balancing Mentorship with Rubric-Based Assessment* (Workshop at Searle Center, Northwestern University) 2017
- *Active Participation in Lecture and Discussion* (Workshop at Searle Center, Northwestern University) 2017
- *New Teaching Assistant Conference*, Northwestern University 2013

Research

Experience

- *Research Assistant, Community Data Science Collective, Northwestern University* *Spring 2013-present*
Mentor: Aaron Shaw
Developed and collaborated on research projects to study the effects of system design on the experiences of newcomers in online collaboration communities.
- *Research Assistant, SONIC Lab, Northwestern University* *Summer 2012-Winter 2013*
Mentor: Noshir Contractor
Conducted research on networks of collaboration among a community of climate scientists. Collected data at Rio Earth Summit and UNFCCC Qatar in 2012.
- *Intern, Center for Internet and Society, Bangalore* *2011-2012*
Mentor: Hans Varghese Mathews
Applied Latent Dirichlet Allocation (LDA) on a large corpus of academic texts to detect shifts in term popularity over time.
- *Student Researcher, S.M.A.L.L. Research Experience for Undergraduates, Williams College* *Summer 2009*
Mentor: Allison Henrich
Conducted original research in the mathematics of virtual knot theory, and co-authored two papers.

Peer-Reviewed Conference Papers and Journal Publications

- 2017 **Narayan, Sneha**, Jake Orlowitz, Jonathan Morgan, Benjamin Mako Hill, and Aaron Shaw. "The Wikipedia Adventure: Field Evaluation of an Interactive Tutorial for New Users". Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work (CSCW 2017).
- 2011 Henrich, Allison, Noel MacNaughton, **Sneha Narayan**, Oliver Pechenik, and Jennifer Townsend. "Classical and virtual pseudodiagram theory and new bounds on unknotting numbers and genus". *Journal of Knot Theory and Its Ramifications*, 20(04), pp.625-650, 2011.
- 2011 Henrich, Allison, Noel MacNaughton, **Sneha Narayan**, Oliver Pechenik, Robert Silversmith, and Jennifer Townsend. A Midsummer Knot's Dream. *The College Mathematics Journal*, 42(2), pp.126-134, 2011

Presentations, Workshops, and Posters

- 2017 **Narayan, Sneha**, Jake Orlowitz, Jonathan Morgan, Benjamin Mako Hill, and Aaron Shaw. "The Wikipedia Adventure: Field Evaluation of an Interactive Tutorial for New Users". Livestream presentation as part of the Wikimedia Research Showcase
- 2016 **Narayan, Sneha**, Jake Orlowitz, Jonathan Morgan, Benjamin Mako Hill, and Aaron Shaw. "The Wikipedia Adventure: Field Evaluation of an Interactive Tutorial for New Users". Conference paper presented at ICA '16: International Communication Association Annual Conference. Fukuoka, Japan.
- 2016 **Narayan, Sneha**, Jake Orlowitz, Jonathan Morgan, Benjamin Mako Hill, and Aaron Shaw. "Organizational Socialization in a Peer Production Community? An Evaluation of The Wikipedia Adventure". Poster presented at OCMC '16: Organizational Communication Mini Conference. Evanston, IL, USA.
- 2015 **Narayan, Sneha**, Jake Orlowitz, Jonathan Morgan, and Aaron Shaw. "Effects of a Wikipedia Orientation Game on New User Edits". Poster presented at CSCW 2015: ACM Conference on Computer Supported Co-operative Work and Social Computing. Vancouver, BC, Canada.
- 2015 *Advancing an Industry/Academic Partnership Model for Open Collaboration Research*. One-day workshop at CSCW 2015: ACM Conference on Computer Supported Co-operative Work and Social Computing. Vancouver, BC, Canada
- 2015 *Network Theory: Peer Production Networks*. Three-day workshop as part of the 7th annual ANN-SONIC International Workshop on Network Theory.
- 2013 Young, Lindsay, **Sneha Narayan**, and Noshir Contractor. "Issue Spaces as Semantic and Social Networks: does what you know determine who you know, and vice versa?" Conference presentation at Sunbelt XXXIII: annual meeting of the International Network for Social Network Analysis. Hamburg, Germany.

Popular Coverage

- *Source Code Berlin: Rethinking the New User Experience*. (July 30th, 2017)
Half-hour long podcast episode featuring my research on orienting new users on Wikipedia
- *Bad Voltage: Infinite Loop of Hack Back*. (June 29th, 2017)
Twenty minute discussion of my research on training new users on Wikipedia on a popular technology and open culture podcast

Service and Memberships

Reviewing

CSCW: ACM Conference on Computer-Supported Co-operative Work and Social Computing (2017)

CHI: ACM Conference on Human Factors in Computing (2016)

Institutional and Departmental Service

Technology and Social Behavior Community Dinner Committee (2012-13)

Founding Member, Northwestern University Graduate Workers (2016-present)

Academic Affiliations

ACM: Association for Computing Machinery

ICA: International Communication Association

Non-Profit Affiliations

Board Member, The Recyclery Collective (2015-present)

Board Member, North American Students of Co-operation (2014-15)