

# Crystal Elaine Peoples

Department of Computer Science  
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## PROFESSIONAL APPOINTMENTS

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2022-present **Duke University, Department of Computer Science**  
 Postdoctoral Research Associate, Alliance for Identity-Inclusive Computing Education (AiiCE)

## EDUCATION

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2022, Ph.D. **Duke University, Sociology**  
 Dissertation: The Significance of Racialized Networks in Contemporary American Sociology  
 Dissertation Co-chairs: Eduardo Bonilla-Silva and Craig Rawlings

2018, M.A. **Duke University, Sociology**  
 Qualifying Areas: Racial Inequality, Social Networks

2015, M.S. **Iowa State University, Sociology**  
 Graduate Minor in Mathematics, Graduate Minor in Statistics

2012, B.S. **Longwood University, Mathematics**  
 Minor in Sociology, Summa Cum Laude, 4.0 GPA

## AREAS OF RESEARCH and TEACHING INTEREST

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Racism and Racial Inequality, (Higher) Education, Data Science, Social Network Analysis, Mixed Methods

## PUBLICATIONS

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\*Denotes undergraduate student, \*\*Denotes graduate student

### Peer-Reviewed Articles

2022 Bonilla-Silva, Eduardo and **Crystal E. Peoples**. “Historically White Colleges and Universities: The Unbearable Whiteness of (Most) Colleges and Universities in America.” *The American Behavioral Scientist*. DOI: <https://doi.org/10.1177/00027642211066047>.

2016 Felmlee, Diane H. and **Crystal E. Peoples**. “Gender, Friendship and” *The Blackwell Encyclopedia of Sociology*, 2nd ed., editor G. Ritzer. DOI: <https://doi.org/10.1002/9781405165518.wbeosg017.pub2>.

2013 Cyr, Justin, Jason Ekstrand, Nathan Meyers, **Crystal Peoples**, and Justin Peters. “Diagonalizing Hermitian Matrices of Continuous Functions.” *The International Journal of Contemporary Mathematical Sciences* 8(5):227-34. DOI: <http://dx.doi.org/10.12988/ijcms.2013.13023>.

### Peer-Reviewed Conference Proceedings

2023, July **Peoples, Crystal E.**, Alicia Nicki Washington, and Shaundra Bryant Daily. “Race and Collaboration in Computer Science: A Network Perspective.” Paper presented at 2023 *American Society of Engineering Education (ASEE) Annual Conference and Exposition*, Baltimore, MD. <https://peer.asee.org/44009>.

2023, July Fairfax, Fatima Glovena\*\*, Elyse McFalls\*, Alex Rogers\*\*, Jabari Kwesi\*, Alicia Nicki Washington, Shaundra Bryant Daily, **Crystal E. Peoples**, Helen Xiao\*, and Eduardo Bonilla-Silva. “Work in Progress: A Novel Approach to Understanding Perceptions of Race Among Computing Undergraduates.” Paper presented at 2023 *ASEE Annual Conference and Exposition*, Baltimore, MD. <https://peer.asee.org/44148>.

### Research Reports

2021 **Peoples, Crystal E.** “Race and Student Success: A Report for Longwood University.” Prepared to aid in developing new strategies to increase student success for racial minorities at the school.

2015 Besser, Terry, Sela Harcey, and **Crystal Peoples**. “Sigma: A Profile of Iowa Small Towns, 1994 to 2014.” Prepared for the National Institute of Food and Agriculture, a division of the United States Department of Agriculture (USDA).

### Manuscripts Under Review and In Progress

*Under Review* **Peoples, Crystal E.**, Paige Knudsen\*, and Melany Fuentes\*. “The Use of Facial Analyzers in Sociological Research: A Comparison of ClarifAI and Kairos Classifications to Hand-Coded Images.”

*Under Review* Razon, Reagan\*, Ali Thursland\*, Fatima Glovena Fairfax\*\*, Jabari Kwesi\*\*, Elyse McFalls\*, Alicia Nicki Washington, **Crystal E. Peoples**, Shaundra Bryant Daily, and Eduardo Bonilla-Silva. “Work in Progress: The Role of Student Backgrounds in Understanding Racial Disparities in Computing.”

*In Progress* **Peoples, Crystal E.** and Roberta Spalter-Roth. “Racialized Collaborations in Sociology: A Network Approach.”

*In Progress* Washington, Alicia Nicki, Melany Fuentes\*, Shaundra Bryant Daily, and **Crystal E. Peoples**. “We Can’t Ignore the Divergent Experiences of Black and White Women in the Tech Industry.”

### HONORS and AWARDS

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2023 Most Influential Faculty/Staff Mentor, Collaborating with Lancers for Academic Success Program (CLASP), Longwood University

- Designed to provide guidance, leadership, socio-emotional, and academic support to students from diverse backgrounds and with a focus on first-generation students, transfer students, racial/ethnic minority students, and limited-income students, CLASP specifically targets development in the areas of cultural engagement, academic success, and career services.

2020 Graduate Student Teaching Award, SOC 111: Contemporary Social Problems, Department of Sociology, Duke University, \$500

### FELLOWSHIPS and GRANTS

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2021-2022 COVID Funding Extension for Sixth- and Seventh-Year Students AY21-22, The Graduate School, Duke University, \$8914.50

2021 Graduate Student Training Enhancement Grant, Office of Interdisciplinary Studies, Duke University, \$6500

2020 Race and the Professions Fellowship, The Kenan Institute for Ethics, Duke University, \$3000

2020	Preparing Future Faculty Fellowship, The Graduate School, Duke University, \$500
2020	Internal Funding for Innovative Teaching, Department of Sociology, Duke University, \$300
2020	Summer Research Fellowship (SRF) for Third-Year Ph.D. Students and Beyond, The Graduate School, Duke University, \$5500
2019	Travel grant for participation in the American Sociological Association (ASA)/George Mason University (GMU) Digital Archive Workshop, National Science Foundation (NSF), \$1000
2019	SRF for Research on Women and Girls of Color, The Graduate School, Duke University, \$5500
2017	SRF for First- and Second-Year Ph.D. Students, The Graduate School, Duke University, \$5500
2016	SRF for First- and Second-Year Ph.D. Students, The Graduate School, Duke University, \$5500

## **TEACHING EXPERIENCE**

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### **Instructor of Record**

Duke University

SOC 111: Contemporary Social Problems  
 AAAS/COMPSCI/STAT 190S: An Introduction to Racial Statistics

- Personally developed special topics course

SOC 229/GSF 241: Gender, Work, and Organizations

Iowa State University

MATH 010: High School Algebra

Longwood University

SOC 101: Principles of Sociology  
 CTZN 110: Community Engagement – Won't YOU Be My Neighbor?  
 MATH 171: Statistical Decision Making  
 MATH 301: Applied Statistics

### **Teaching Assistant**

Duke University

UNIV 101: The Invention and Consequences of Race  
 SOC 215: Sociology of Racism in America  
 SOC 218: Sex, Gender, and Society  
 SOC 345: Nations, Regions, and the Global Economy

Iowa State University

MATH 151: Calculus for Business and the Social Sciences  
 MATH 166: Calculus II  
 MATH 266/267: Differential Equations and Laplace Transforms

## Guided Research and Independent Studies

### COMPSCI 391: Photo Analyzers and Racism

- 2023. Melany Fuentes. Duke University. “Exploring the Role of Facial Analyzers in the Reification of Racism.” Undergraduate Student Poster Presentation. Southern Sociological Society (SSS) Annual Meeting. Myrtle Beach, SC. ^^Won Duke Undergraduate Research Support Office Conference Funding (\$400).
- 2023. Melany Fuentes. Duke University. “Exploring the Role of AI Photo Analyzers in the Reification of Racism.” Undergraduate Student Poster Presentation. Duke Undergraduate Research Symposium, Visible Thinking, Duke University. Durham, NC.

### RACESOC 395T/396T/795T/796T: Perceptions of Race in CS

- 2023. Jabari Kwesi\*, Elyse McFalls\*, Helen Xiao\*, Fatima Fairfax\*\*, Alex Rogers\*\*. Duke University. “Understanding Perceptions of Race Among Computing Undergraduates.” BASS Connections Poster Presentation. Bass Connections Research Day, Duke University, 2023. ^^Won 2<sup>nd</sup> place (out of 41) in poster competition.

### MATH 490: Social Network Analysis

- 2017. Danielle Harris. Longwood University. “A Different MGM: Movies, Graphs, and Math.” Undergraduate Student Paper Presentation. The Mathematical Association of America (MAA), Maryland-District of Columbia-Virginia Section Annual Meeting. Frostburg, MD.

## PRESENTATIONS

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<i>Forthcoming</i>	“The Use of Facial Analyzers in Sociological Research: A Comparison of ClarifAI and Kairos Classifications to Hand-Coded Images.” Southern Sociological Society (SSS) Annual Meeting. New Orleans, LA.
2023	“The Use of Machine Learning in Sociological Research: A Comparison of ClarifAI and Kairos Classifications to Hand-Coded Images.” The Race Workshop. Duke University. <b>Invited Presentation.</b>
2023	“Race and Collaboration in Computer Science: A Network Perspective.” ASEE Annual Meeting. Baltimore, MD.
2023	“Work in Progress: A Novel Approach to Understanding Perceptions of Race Among Computing Undergraduates.” (with Jabari Kwesi*). ASEE Annual Meeting. Baltimore, MD.
2023	“Historically White Colleges and Universities: The Unbearable Whiteness of Most Colleges and Universities.” (with Eduardo Bonilla-Silva). SSS Annual Meeting. Myrtle Beach, SC.
2020	“Birds of a Feather Write Together?: Racial Integration in Co-authorship among a Cohort of Underrepresented Minority Faculty in Sociology.” SSS Annual Meeting. Jacksonville, FL. Canceled due to COVID-19.
2020	“Measuring Cultural and Identity Taxation in Higher Education: A Structural Equation Modeling Approach.” (with Blaque Robinson). Mini-Conference: Sociology as a Vocation for Women of Color. Eastern Sociological Society (ESS) Annual Meeting. Philadelphia, PA. 2020. <b>Invited Panel Presentation.</b>

- 2019 “Toward a Network Analysis of Underrepresented Minority Faculty in Sociology.” ASA Annual Meeting. New York, NY. **Invited Panel Presentation.**
- 2019 “Racial Integration in Academic Co-authorship Networks.” SSS Annual Meeting. Atlanta, GA. **Organizer/Presider of Session “The Racial Economy of Network Formation.”**
- 2019 “Modeling Social Interactions with Graph Theory.” Department of Mathematics and Computer Science Colloquium Series. Longwood University. **Invited Presentation with Honorarium.**
- 2018 “Measuring Cultural Taxation in Higher Education.” ASA Annual Meeting. Philadelphia, PA.
- 2018 “Predicting International Collaborations: A Network Analysis of 4 Scientific Disciplines, 1981-2015.” SSS Annual Meeting, New Orleans, LA.
- 2017 “The Internationalization of Knowledge Creation: A Comparative Analysis of 3 Scientific Disciplines.” ASA Annual Meeting. Montreal, Canada.
- 2016 “The Internationalization of Scientific Knowledge Creation.” International Network for Social Network Analysis (INSNA) Annual Meeting. Newport Beach, CA.
- 2016 “From Strangers to Friends: How Mathematics and Sociology Work Together to Understand Society.” Department of Mathematics and Computer Science Colloquium Series. Longwood University. **Invited Presentation with Honorarium.**
- 2015 “The Role of Gathering Places in Rural Communities: Network Analyses of 99 Midwestern Towns.” Rural Sociological Society (RSS) Annual Meeting. Madison, WI.

## **PROFESSIONAL EXPERIENCE**

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- Summer 2021 Research Intern, Dr. David Shoenthal, Office of Academic Affairs, Longwood University  
Researched and made recommendations to improve the retention rates for their students of color.
- 2017-2018 Interviewer, Dr. Cary Moskovitz, Thompson Writing Program, Duke University  
Contributed to interview protocol on text recycling, recruited and interviewed participants.
- 2015-2017 Research Assistant, Dr. James Moody, Department of Sociology, Duke University  
Created network surveys and analyzed network data for a variety of local programs.
- 2014-2015 Research Assistant, Dr. Terry Besser, Department of Sociology, Iowa State University  
Longitudinal study of rural community social capital, amenities and quality of life.  
Funded by the USDA; Grant No. 2014-68006-21827

## **PROFESSIONAL DEVELOPMENT**

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- In progress* Writing in the Disciplines Certificate, Thompson Writing Program, Duke University.
- 2024 FAIR HEALTH Workshop: Fostering AI/ML Research for Health Equity and Learning Transformation, Duke AI Health, Duke University, January.
- 2023 NSF & Society for Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) Grant Writing and Peer Review Workshop, August 14-16. Miami, FL. **Invited Participant.**

- 2023 Building a Culture of Allyship: A 6-week Virtual Summer DEIB Training Program, Duke University, July-August. **Invited Participant.**
- 2023 The Postdoc Academy: Building Skills for a Successful Career, edX course by Boston University, June-July.
- 2023 Introduction to Data Science with R Pathway, Duke Innovation Co-Lab, Center for Computational Thinking, Duke University, May 15-19.
- 2023 Core Curriculum Webinar Series, The National Center for Faculty Development and Diversity, “Every Semester Needs a Plan”; “How to Align Your Time with Your Priorities”; “How to Develop a Daily Writing Practice”; “Mastering Academic Time Management”; “Moving from Resistance to Writing”; “The Art of Saying No”; “Cultivating Your Network of Mentors, Sponsors, & Collaborators”; “Overcoming Academic Perfectionism”; “How to Engage in Healthy Conflict”; “How to Manage Stress, Rejection, & the Haters in Your Midst”, April-May.
- 2022 The Independent Scientist and Leader with Dr. Garth Fowler, Duke Postdoctoral Services Short Course, December. **Invited Participant.**
- 2022 Understanding the INCLUDES Grant Expectations with Dr. Fay Cobb Payton, AiiCE Workshop, Duke University, September.
- 2020-2021 Race and the Professions Fellow, Duke University. **Invited Participant.**
- 2020-2021 Preparing Future Faculty Fellow, Duke University. **Invited Participant.**
- 2020 The Graduate Symposium on Innovative Pedagogy, Duke University. **Invited Participant.**
- 2019 ASA/GMU Digital Archive Workshop, George Mason University. **Invited Participant.**
- 2017 Social Justice in Action Leadership Summit: Continuing the Race Conversation: Politics, Platforms, & Progress, Longwood University.
- 2014 LINKS Center Workshop on Social Network Analysis, University of Kentucky.

## **PROFESSIONAL SERVICE**

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- Reviewer Journals: *Social Forces*, *Gender and Society*, *Sociology of Race and Ethnicity*, *Social Science Research*  
 Conferences: Association for the Study of Higher Education (ASHE)  
 Foundations: NSF – Directorate for STEM Education
- Presider ASA 2023 – “Leaky Pipelines: Examining Privilege and Exclusion in STEM Persistence”  
 ASEE 2023 – “Equity, Culture, and Social Justice in Education Technical Session 9 (T359B)”

### **Sociology At-Large**

- 2022-2023 Committee Member, Teaching and Learning Section Nominations Committee, ASA
- 2022-2023 Committee Member, Teaching and Learning Section Cooperative Initiatives, ASA

- Summer 2021 Guest Lecturer, Moore Undergraduate Research Apprentice Program (MURAP), University of North Carolina-Chapel Hill
- The mission of MURAP is “to contribute in a significant way to achieving diversity in academia by increasing the number of students in the US — both from underrepresented minority groups as well as others with a proven commitment to diversity — who pursue doctoral degrees in the social sciences, humanities, and fine arts.”

### **Duke University**

- 2024 Reviewer, Summer Internship Fellowship Program, Office of the Provost, Duke Career Center, and The Graduate School
- 2023 Reviewer, Graduate Student Training Enhancement Grant, Office of Interdisciplinary Studies
- 2022-Present AiiCE Representative, Center for Computational Thinking
- 2020-2021 Anonymous Member, Antiracism Committee, Department of Sociology
- 2020-2021 Graduate Representative, Undergraduate Studies Committee, Department of Sociology
- 2019-2020 Graduate Representative, Faculty Committee, Department of Sociology
- 2018-2020 Graduate Mentor, Duke First-Generation Student Network
- Graduate Student Mentor, Duke Low-Income and First-Generation Students Conference, 2019
- 2018-2019 Graduate Representative, Policy Committee, Department of Sociology
- 2017-2022 Student Coordinator, The Race Workshop
- “Lead Coordinator” during 2020-2021 academic year
- 2017-2018 Graduate Liaison, Department of Sociology
- Wrote and circulated a 10-page report on graduate students’ perspectives of the department for the department’s external review.
- 2017-2018 Staff Appreciation Gifts Organizer, Department of Sociology

### **Longwood University**

- 2022-Present Academic Tutor – Statistician, CLASP

### **PROFESSIONAL ASSOCIATIONS**

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American Sociological Association (ASA)

- Section Memberships: Racial and Ethnic Minorities; Sociology of Education; Science, Knowledge, and Technology

Southern Sociological Society (SSS)

Association for the Study of Higher Education (ASHE)

American Society for Engineering Education (ASEE)