Chinasa T. Okolo, Ph.D.

Research Interests	AI governance & policy, AI literacy, human-centered AI, explainable AI, data economies, African development, global health

Education

Cornell University, Ithaca, NY	2018 – 2023
Doctor of Philosophy, Computer Science	
Master of Science, Computer Science	
Pomona College, Claremont, CA	2014 – 2018
Bachelor of Arts, Computer Science	

Selected Fellowships, Honors, and Awards

Trailblazers in Engineering	July 2023
Rising Stars in Management Science & Engineering	May 2023
ICICLE Educational Fellow, National Science Foundation	May 2023
Bouchet Graduate Honor Society Scholar, Cornell University	Jan 2023
Distinguished Leadership in Service Award, Cornell Bowers CIS	Nov 2022
Provost Diversity Fellowship, Cornell Graduate School	Oct 2022
LEAP Alliance Dissertation Fellowship, Google	Sep 2022
Global Racial Justice Graduate Fellow, Mario Einaudi Center	Aug 2022
Community Outreach Award, Cornell Graduate School	May 2022
blackcomputeHER Fellow, blackcomputeHER.org	Mar 2020
John Postel Scholar, North American Network Operators Group	Aug 2019
UNCF Oracle Academy Fellow, Oracle Corporation	Jul 2019
Graduate Dean's Scholar, Cornell University	May 2019
GEM Fellowship, The National GEM Consortium	Apr 2019

Publications

Hongjin Lin, Naveena Karusala, **Chinasa T. Okolo**, Catherine D'Ignazio, and Krzysztof Gajos. " 'Come to us first': Centering Community Organizations in Artificial Intelligence for Social Good Partnerships." *In preparation*, 2024.

Chinasa T. Okolo and Hongjin Lin. "Practitioner Perspectives on Model Explainability in AI for Social Good." *Under review*, 2024.

Kadijatou Diallo, Jonathan Smith, **Chinasa T. Okolo**, Dorcas Nyamwaya, Jonas Kgomo, and Richard Ngamita. "African Case Studies in AI Policy Development." To appear in the *Data for Policy Conference*. Cambridge University Press, 2024.

Chinasa T. Okolo. "Reforming Data Regulation to Advance AI Governance in Africa." *Foresight Africa*. The Brookings Institution, 2024.

Chinasa T. Okolo*, Dhruv Agarwal*, Aditya Vashistha, Nicola Dell. " 'If it is easy to understand then it will have value': Examining Perceptions of Explainable AI with Community Health Workers in Rural India." In the *Proceedings of the ACM on Human-Computer Interaction (PACM)*, 2024.

Chinasa T. Okolo. "AI in the Global South: Opportunities and challenges towards more inclusive governance." *TechTank*. The Brookings Institution, 2023.

Chinasa T. Okolo. "Addressing Global Inequity in AI Development." *Handbook of Critical Studies of Artificial Intelligence*. Edited by Simon Lindgren. Edward Elgar Publishers, 2023.

Chinasa T. Okolo. "The Promise and Perils of Generative AI: Case Studies in an African Context." In the *African Conference for Human Computer Interaction* (AfriCHI), 2023.

Chinasa T. Okolo. "Towards a Praxis for Intercultural Ethics in Explainable AI." In the *Many Worlds of AI Conference*, 2023.

Chinasa T. Okolo, Kehinde Aruleba, and George Obaido. "Challenges to Effective AI Adoption and Implementation in Africa." *Responsible AI in Africa - Challenges and Opportunities*, pp 35-64. Edited by Kutoma Wakunuma, Damian Eke, and Simi Akintoye. Palgrave Macmillan UK, 2023.

Chinasa T. Okolo, Nicola Dell, and Aditya Vashistha. "Making AI Explainable in the Global South: A Systematic Review." In the *Conference on Computing and Sustainable Societies* (COMPASS), 2022.

Chinasa T. Okolo. "Optimizing Human-centered AI for Healthcare in the Global South." *Patterns*, 100421. Cell Press, 2022.

Chinasa T. Okolo, Srujana Kamath, Nicola Dell, and Aditya Vashistha. " 'It cannot do all of my work': Community Health Worker Perceptions of AI-Enabled Mobile Health Applications in Rural India." In the *Conference on Human Factors in Computing Systems* (CHI), 2021.

Chinasa T. Okolo. "Privacy and Security Implications of mHealth Applications in Sub-Saharan Africa." In the *Cornell Healthcare Review*, 2020.

Selected Presentations	

Towards a Digital Frontier: The Next Stage of Africa's AI Startup Ecosystem
- DZGENAI'23, *Beni Abbes, Algeria*   Dec 2023
- AI for Africa/African Startup Conference, *Algiers, Algeria*   Dec 2023

Globalizing Perspectives on AI Governance: Africa's Role in International AI Cooperation
- Harvard/MIT Advancements in Global AI Policy, *Virtual*   Dec 2023
- EquiAI Future of AI Governance Webinar, *Virtual*   Nov 2023

Decentralizing AI: Challenges and Opportunities for the Majority World
- AI + Society Forum, *London, UK*   Oct 2023

AI Explainability in the Global South: Towards an Inclusive Praxis for Emerging Technology Users
- Georgetown Hoyalytics Seminar, *Washington, D.C.*   Oct 2023
- Pomona College CS Colloquium, *Claremont, CA*   Sep 2023
- Yale Digital Humanities Lab Seminar Series, *Virtual*   Aug 2023

Towards a Praxis for Intercultural Ethics in Explainable AI
- Many Worlds of AI Conference, *Cambridge, UK*   Apr 2023

Examining Perceptions of Explainable AI with Community Health Workers in Rural India
- Stanford MS&E Rising Stars Workshop, *Stanford, CA*   May 2023
- MIDAS Future Leaders Summit, *Ann Arbor, MI*   Apr 2023
- Yale Bouchet Conference, *New Haven, CT*   Mar 2023

Making AI Explainable for Novice Technology Users in Low-Resource Settings
- Microsoft Africa Research Institute Seminar, *Virtual*   Mar 2023
- CSRAI Young Achiever Symposium, *Virtual*   Feb 2023
- University of Washington Change Seminar, *Virtual*   Oct 2022
- Ivy Collective Engineering Doctoral Consortium, *Philadelphia, PA*   Oct 2022
- ACM Tapia Doctoral Consortium, *Washington, DC*   Sep 2022
- University of Queensland AI4PAN Seminar Series, *Virtual*   Aug 2022
- Trustworthy AI Workshop at DeepIndaba, *Virtual*   Aug 2022
- Google Research India AI for Social Good Group, *Bangalore, India*   Jul 2022
- Microsoft Technology & Empowerment Seminar, *Bangalore, India*   Jul 2022
- WiscProf Future Faculty in Engineering Workshop, *Madison, WI*   May 2022

Making AI Explainable in the Global South: A Systematic Review
- Paper Session 7 (COMPASS), *Seattle, WA*   Jun 2022
- Big Data & AI in the Global South (FAccT), *Seoul, Korea*   Jun 2022

"It cannot do all of my work": Community Health Worker Perceptions of AI-Enabled Mobile Health Applications in Rural India
- Justice, Wellbeing and Health Session (CHI), *Virtual*   May 2021
- Technology for Underserved Communities (INFO 6600), *Virtual*   Apr 2021

Optimizing for Human-centric AI in the Global South
- 2nd ELLIS Workshop on Human-Centric Machine Learning, *Virtual*   May 2021
- Practical ML for Developing Countries Workshop (ICLR), *Virtual*   May 2021

The Limits of Global Inclusion in AI Development
- Reframing Diversity in AI Workshop (AAAI), *Virtual*   Feb 2021

AI in the "Real World": Examining the Impact of AI Deployment in Low-Resource Contexts
- Navigating the Broader Impacts of AI Workshop (NeurIPS), *Virtual*   Dec 2020

Understanding the Role of AI-enabled Healthcare in the Global South
- 2nd Annual Data Science for Social Good Workshop, *Virtual*   Nov 2020
- Michigan AI Symposium: AI and Health, *Virtual*   Oct 2020

ACIPS: A Framework for Evaluating Patient Perception in the Introduction of AI-enabled Healthcare
- Black in AI Workshop (NeurIPS), *Virtual*   Dec 2020
- Data4Good: Designing for Diversity & Development, *Virtual*   Sep 2020

Topic Modeling Approaches for Understanding COVID-19 Misinformation Spread in Sub-Saharan Africa
- Harvard University CRCS AI for Social Good Workshop, *Virtual*   Jul 2020

CNN/RNN Approaches for Irregular Pediatric Respiratory Motion Detection
- Women in Machine Learning Un-Workshop at ICML, *Virtual*   Jul 2020
- Women in Computer Vision Workshop at CVPR, *Virtual*   Jun 2020

Professional Activities and Service	**Equiano Institute**	Aug 2023 – Present
	Ethics Advisor	
	Advising research on safe and trustworthy AI in Africa.	

IEEE Standards Association Mar 2023 – Present
Working Group Member, Algorithmic Bias
Developing guidelines to address issues of bias in algorithm development.

African Union Jun 2022 – Present
Drafting Member, AU Continental Strategy on AI
Developing a report to guide AI strategy & policy within the African continent.

ACM Jun 2022 – Present
Member, US Technology Policy Committee
Consulting on computing-related policy issues.

Lacuna Fund Jun 2021 – Dec 2021
Technical Advisory Panel Member, Racial Equity & Health
Reviewed funding applications for research proposals.

Mechanism Design for Social Good 2020 – 2021
Co-Organizer, Working Group for Development
Led projects using technology to address challenges in the Global South.

Grant Committees

Reviewer
- Nigeria AI Research Scheme (NAIRS)
- National Endowment for the Humanities (NEH)
- Deep Learning Indaba

Program Committees

Paper Reviewer
- ACM CSCW Conference
- ACM FAccT Conference
- ACM EAAMO Conference
- ACM CHI Conference
- ACM COMPASS Conference
- IEEE RESPECT Conference

Workshop Paper Reviewer
- Autonomous Agents for Social Good Workshop at AAMAS
- Workshop on Machine Learning for the Developing World at NeurIPS
- Workshop on Mechanism Design for Social Good (MD4SG)
- Practical Machine Learning for Developing Countries Workshop at ICLR
- ACM Richard Tapia Celebration of Diversity in Computing Conference

Conference Chair, Session Chair, Volunteer
- ML4H Symposium, Outreach Co-Chair
- ACM EAAMO, Registration Co-Chair
- ACM COMPASS, Student Volunteer
- ICTD Conference, Student Volunteer
- ACM FAccT, Session Chair
- Women in Machine Learning Workshop (WiML) at NeurIPS, Volunteer

Work Experience

Fellow Aug 2023 – Present
The Brookings Institution Washington, D.C.
Conducting research and policy analysis on AI-related issues in emerging markets.

Graduate Student Success Consultant May 2022 – Jul 2023
Cornell Diversity Programs in Engineering Ithaca, NY
Developed educational and extracurricular programming for underrepresented STEM
graduate and postdoctoral students.

Strategic Growth Research Intern Jun 2022 – Dec 2022
Harambeans Remote
Tracked funding updates, investor activity, and venture growth of African startups.
Analyzed business models and partnerships to guide organizational restructuring.

HID Health Incubation Intern May 2021 – Aug 2021
Apple Remote
Developed new Responsible AI/ML methodologies for health sensing applications.

Ryan Scholars Graduate Coordinator Aug 2019 – May 2022
Cornell Diversity Programs in Engineering Ithaca, NY
Hosted academic coaching sessions focused on developing goals and action plans cen-
tered on academic, personal, and professional success of scholars in the program.

Strategic Advisor May 2020 – May 2021
Doing Good Work in Africa (DOWA) Remote
Formed corporate partnerships with African-based companies, public entities, and
NGOs. Connected university students to internship and volunteer opportunities.

TA Development Consultant May 2019 – May 2020
Cornell University College of Engineering Ithaca, NY
Developed and co-facilitated workshops to prepare new graduate and undergraduate
TAs for their roles in working with students by learning innovative teaching methods.

Program Assistant Jul 2019
Cornell Diversity Programs in Engineering Ithaca, NY
Assisted program directors and residential assistants for the CURIE Academy summer
program. Mentored high school girls interested in pursuing engineering.

Technology Education Intern Sep 2016 – Dec 2016
Pomona Hope Community Center Pomona, CA
Revamped the technology curriculum for K-5 students by introducing computer science
concepts in visual programming languages such as Tynker, Blockly, and Lightbot.

Microbiology Laboratory Intern Feb 2015 – May 2015
Pomona Valley Hospital Medical Center Pomona, CA
Worked in Point of Care to meet hospital needs such as employee data management,
servicing healthcare electronic devices for nurses, and quality control of shipments.

Research Experience

Graduate Research Assistant   Jan 2019 – Jul 2023
Cornell University   Ithaca, NY
Departments: Computer Science & Information Science
Conducted user studies to understand perceptions and implications of AI in low-resource contexts. Developed explainable AI prototypes to understand important aspects of model decision-making for novice technology users.

Africa's Digital Future Fellow   Feb 2023 – March 2023
E4E   Remote
Conducted research on tech policy and AI regulation in Africa in preparation for submission to the UN Global Digital Compact.

Research Intern   May 2018 – Aug 2018
Microsoft Research   Cambridge, UK
Group: Biological Computation, *Mentors:* Andrew Phillips, Paul Grant
Developed techniques for understanding information processing in biological systems. Created computational models and domain-specific tools for bacterial quorum sensing.

Research Assistant   Sep 2017 – May 2018
Pomona College   Claremont, CA
Department: Computer Science, *Mentor:* Alexandra Papoutsaki
Analyzed gaze prediction and computer vision techniques in eye-tracking library/web applications. Classified training datasets and isolated factors that cause inaccuracy.

NSF REU Student Researcher   May 2017 – Aug 2017
Carnegie Mellon University   Pittsburgh, PA
Department: Computational Biology, *Mentors:* Robert Murphy, Joshua Kangas
Used software engineering methodologies to improve the UI/UX of CellOrganizer, a tool used to learn generative models of cell organization and synthesize cell images.

Research Assistant   Sep 2015 – Dec 2016
Pomona College   Claremont, CA
Department: Neuroscience, *Mentor:* Elizabeth Glater
Wrote and edited MATLAB code to efficiently track the movement of Caenorhabditis elegans. Ran behavioral assays, made LB agar plates, and inoculated bacteria.

HHMI EXROP Fellow   Jun 2016 – Aug 2016
Columbia University   New York, NY
Departments: Neuroscience, Physiology, *Mentor:* Michael N. Shadlen
Crafted experiments to test visual perception and decision-making in human and non-human primates by tracking eye movements and response time to visual stimuli.

NSF REU Student Researcher   May 2015 – Aug 2015
The University of Georgia   Athens, GA
Departments: Computer Science, Infectious Diseases, *Mentor:* Shannon Quinn
Used computational methods to advance analysis of organellar network evolution to detect changes in morphology of epithelial lung cells.

Teaching Experience	**Graduate Teaching Assistant**	Aug 2018 - Aug 2019
	Cornell University	Ithaca, NY

Taught discussion sections and occasional lectures. Hosted office hours and coordinated project grading with other class TAs and undergraduate consultants.

- CS 1112, *Introduction to Computing with MATLAB*   Fall 2018
- CS 2110, *Object-Oriented Programming and Data Structures*   Summer 2019

Collaborative Learning Facilitator   Jun 2019 – Aug 2019
Cornell University   Ithaca, NY
Facilitated recitations and tutored students in the Fundamental Programming Concepts (CS 1109) course.

Coursework

Graduate Level (Computer Science): Advanced Systems; Computer Vision; Advanced Artificial Intelligence; The Structure of Information Networks; Data Science for Social Change

Graduate Level (Information Science): Health & Computation; Information, Society, & Technology; Technology for Underserved Communities, Design Research

Graduate Level (Business & Management): Business & Management Fundamentals for STEM Graduate Students; Entrepreneurship for Scientists and Engineers; AI Strategy & Applications; Technology Strategy; Entrepreneurial Strategy for Technology Ventures

Leadership and Outreach

- **CIS Director of Diversity & Inclusion Search**   Nov 2020 – Jan 2021
  Organized graduate student interviews with candidates.
- **Computer Science Task Force on Fighting Racism**   Jul 2020 – May 2021
  Advised the Task Force on ways to foster inclusion of Black community members.
- **Computer Science Dean Search Committee**   Jul 2020 – Aug 2020
  Participated in the dean search for the Computer Science Department.
- **CS Graduate Admissions Committee**   Nov 2019 – Jan 2023
  Reviewed PhD applications and mentored prospective students during departmental visit days.
- **CodeAfrique Graduate Mentor**   Dec 2019 – Jan 2020
  Taught Ghanaian high school and undergraduate students introductory computer science concepts.
- **Cornell Graduate Student Ambassador**   Nov 2019 – Jul 2023
  Participated in recruitment events and mentored prospective students.
- **SOSA Project Lead**   Oct 2019 – May 2021
  Organized and implemented menstrual health workshops in Nigeria to teach feminine hygiene and reusable pad construction to primary school girls.
- **Black in AI**   Sep 2019 – Present
  Mentoring prospective graduate (MS/PhD) applicants and assisting with graduate school application prep information sessions.
- **CIS Diversity Committee**   Mar 2019 – May 2020
  Implemented solutions to improve recruitment & retention in graduate programs.