AMY Z. CHEN

amychen@gatech.edu | amyzlchen@gmail.com | amyzlc.github.io

EDUCATION

Georgia Institute of Technology | Atlanta, GA, USA   **August 2020 – Present**
Ph.D. in Human-Centered Computing

- *Advisor:* Dr. Michael Best
- PhD minor (coursework) in digital technologies and public policy

Harvard University | Cambridge, MA, USA   **May 2014**
A.B. *magna cum laude* in Applied Mathematics, with focus in physics. GPA: 3.96.

- *Senior thesis:* Mathematical modeling of malaria transmission with human movement between populations (advisor: Dr. Caroline Buckee)

EMPLOYMENT

Georgia Institute of Technology   **August 2020 – Present**
Graduate Research Assistant   *Atlanta, GA, USA*

- Engaging community health workers to understand the potential role and implications of emerging communication-related technologies in their health promotion work and advocacy, including social media, natural language processing analytics, and large language model-based AI applications.
- Collaborating with public health researchers and community health partners on a randomized controlled trial on using adaptive SMS behavioral nudges to encourage COVID-19 testing:
  - Conducting social media data analysis to investigate barriers and facilitators to COVID-19 testing for underserved communities in Georgia, to inform writing of behavioral nudge messages.
  - Leading design and development of a platform for use by collaborators to write and send targeted SMS text message nudges, and evaluating its use as a novel health communication tool.
- Conducted a qualitative interview-based study of Black and Latinx young adult "Peer Champions" as part of a community-based participatory research project, understanding their approach to countering vaccine hesitancy using the concept of cultural code-switching, and identifying opportunities for social media-based tools to support their work (paper accepted to CSCW 2024).
- Designed and developed a social media monitoring dashboard to inform health and other community-based partners providing COVID-19 services for underserved communities in Georgia.
- Reviewed and analyzed digital human rights documents with the Digital Constitutionalism Network.
- Have mentored more than ten masters (HCI, CS, design) and undergraduate students.

Everwell Health Solutions   **July 2019 – May 2020**
Research Engagements Lead   *Bangalore, India*

- Facilitated implementation of and research on 99DOTS, a mobile phone-based tuberculosis (TB) medication adherence support technology:
  - Worked with partners in Uganda to adapt design of the 99DOTS system, provide technical set-up support, and provide guidance in using 99DOTS platform data for a cost-effectiveness evaluation.
  - Led conversations with AI researchers to predict TB medication adherence, discuss potential AI-informed features for 99DOTS, and define further research questions on AI in TB management.

Microsoft Research India   **August 2017 – July 2019**
Research Fellow   *Bangalore, India*

- Conducted a before-after impact evaluation of the government deployment of 99DOTS on patient health outcomes in Himachal Pradesh, India.
- Co-hosted workshop with the Global Fund on AI and TB care in India, inviting researchers, implementers, and government officials to discuss data system readiness, use cases, and risks.
- Conducted quantitative analyses of 99DOTS patient and provider usage trends across sites in India.

IDinsight   **August 2014 – August 2017**
Senior Associate (August 2016 – August 2017)   *Vijayawada, India*
Associate (August 2014 – August 2016)   *Kampala, Uganda; Lusaka, Zambia; Nairobi, Kenya*

- Conducted impact evaluations of innovative products and programs in East Africa in sectors including education, energy, and agriculture, with the aim to inform implementers' or funders' decisions.
- Designed and ran process evaluations of government rural livelihoods programs to support farmers' and small store-owners' cooperatives, informing implementation teams in Andhra Pradesh, India.
- Analyzed outcomes of past engagements for initial internal review of IDinsight's own impact.

Harvard School of Public Health   **May – July 2014**
Research Assistant   *Cambridge, MA, USA*

- Conducted exploratory analysis of data from Nigerian anti-malarial drug authentication services.

Vecna Cares   **May – August 2013**
Intern   *Kilgoris, Kenya*

- Managed adoption of custom electronic medical record systems in rural clinics in western Kenya in collaboration with district government health team, including training healthcare staff, on-site observation of usage, and addressing technical problems.

FELLOWSHIPS AND HONORS

- Georgia Institute of Technology President's Fellowship   2020
- Phi Beta Kappa   2013
- US Department of Education Foreign Language and Area Studies Fellow   2012
- Harvard College Research Program Fellow   2012

PUBLICATIONS

Peer-reviewed journal articles and conference papers:

- *(accepted and in press)* **AZ Chen**, C Park, A Darkwa, RC Holliday, and ML Best (2024). ""We're Not in That Circle of Misinformation": Understanding Community-Based Trusted Messengers Through Cultural Code-Switching." *Proceedings of the ACM on Human-Computer Interaction* 8 (CSCW1): 152:1-152:36.
- TH Akintobi, R Quarells, RA Bednarczyk, S Khizer, B Taylor, M Nwagwu, M Hill, C Ordóñez, G Sabben, S Spivey, K Davis, ML Best, **AZ Chen**, K Lovell, L Craig, and M Mubasher (2023). "Community-Centered Assessment to Inform Pandemic Response in Georgia (US)." *International Journal of Environmental Research and Public Health* 2023, 20(9), 5741. (link)
- **AZ Chen**, R Kumar, RK Baria, PK Shridhar, R Subbaraman, and W Thies (2023). "Impact of the 99DOTS digital adherence technology on tuberculosis treatment outcomes in North India: a pre-post study." *BMC Infectious Diseases* 23, 504. (link)
- D Patel, C Berger, A Kityamuwesi, J Ggita, L Kunihira Tinka, P Turimumahoro, J Feler, L Chehab, **AZ Chen**, N Gupta, S Turyahabwe, A Katamba, A Cattamanchi, and A Sammann (2020). "Iterative Adaptation of a Tuberculosis Digital Medication Adherence Technology to Meet User Needs:

Qualitative Study of Patients and Health Care Providers Using Human-Centered Design Methods." *JMIR Formative Research* 4(12): e19270. (link)

- A Cross, N Gupta, B Liu, V Nair, A Kumar, R Kuttan, P Ivatury, **A Chen**, K Lakshman, R Rodrigues, G D'Souza, D Chittamuru, R Rao, K Rade, B Vadera, D Shah, V Choudhary, V Chadha, A Shah, S Kumta, P Dewan, B Thomas, and W Thies (2019). "99DOTS: a low-cost approach to monitoring and improving medication adherence." *Proceedings of the Tenth International Conference on Information and Communication Technologies and Development*: article no. 15. (link)

- H Channa, **AZ Chen**, P Pina, J Ricker-Gilbert, and D Stein (2019). "What drives smallholder farmers' willingness to pay for a new farm technology? Evidence from an experimental auction in Kenya." *Food Policy* 85: 64-71. (link)

- **AZ Chen**, J Fischer, A Fraker, NB Shah, S Shirrell, and D Stein (2017). "Welfare impacts of an entry-level solar home system in Uganda." *Journal of Development Effectiveness* 9(2): 277-294. (link)

Workshop papers (lightly peer-reviewed):

- **AZ Chen**, A Zhao, C Park, and ML Best (2022). "A COVID-19 Social Media Monitoring and Outreach Dashboard for Community-Based Trusted Messengers." International Workshop on Cyber Social Threats at 16th International AAAI Conference on Web and Social Media (ICWSM 2022). (link)

- **AZ Chen** (2022). "A social media dashboard for community-based trusted messengers: a use case of design for countering mis/disinfo." Workshop on Designing Credibility Tools to Combat Mis/Disinformation: A Human-Centered Approach at ACM 2022 CHI Conference on Human Factors in Computing Systems.

- **AZ Chen** (2021). "Datafication of public services: digital citizenship at the margins." Workshop on In Search of the Alternative Future: Developing Participatory Digital Citizenship to Address the Crisis of Democracy at ACM 2021 CHI Conference on Human Factors in Computing Systems.

- **AZ Chen** (2020). "The limit of good intentions." Workshop on Collective Organizing and Social Responsibility at 23rd ACM Conference on Computer-Supported Cooperative Work and Social Computing.

PRESENTATIONS

- **AZ Chen** (27 Sep 2023). "Georgia Peers for Equity Against COVID-19 and for Health (Georgia PEACH): Engaging Young Adults in Action Research on Health Promotion, Countering Misinformation, and Social Media." Presentation at 12th RCE Americas Regional Meeting, hosted by RCE Greater Atlanta at Georgia Institute of Technology.

- A Darkwa, **AZ Chen**, G Brooks, ML Best, R Quarells, TH Akintobi, and RC Holliday (7 Nov 2022). "Partnering with communities and college campuses to address COVID-19 vaccine hesitancy and uptake among young adults, 18-24." Presentation at American Public Health Association (APHA) Annual Meeting 2022.

- **AZ Chen**, C Park, and ML Best (2 Nov 2022). "Opportunities for social media-based tools to support young adult Peer Champions in misinformation countering and health promotion." Poster presented at GVU Research Showcase, Georgia Institute of Technology.

- **AZ Chen**, A Zhao, A Gerig, C Park, Y Ramesh, D Aravind, R Qian, R Starr, J Wilson, M Sanders, and ML Best (2 Nov 2022). "A health communicators' dashboard for mixed methods and social media data analysis to inform targeted text nudges." Poster presented at GVU Research Showcase, Georgia Institute of Technology.

- **AZ Chen** (27 Oct 2022). "Social media-based tools for community public health response." Panel on Community Response to Global Health Challenges, Global Development Week, Georgia Institute of Technology.

- G Barkhuff, **AZ Chen**, CL Connelly, M Jayaram, N Palladino, D Redeker, ML Best (8 Jun 2022). "Building resources for digital rights advocacy and research: exploring the Digital Constitutionalism Database." Community Lab, presented at RightsCon 2022.
- **AZ Chen**, S Ray Chaudhuri, and N Gupta (2019). "Empowering TB care with digital tools and data." Workshop on AI for Social Good, Google Research India.
- **AZ Chen** (2019). "Nikshay and Electronic Adherence." Workshop on Artificial Intelligence and Tuberculosis, Harvard India Research Center.
- **AZ Chen** and A Sharma (2019). "AI and Tuberculosis Adherence." Workshop on Leveraging Artificial Intelligence / Machine Learning to Defeat TB in India by 2025, co-hosted by The Global Fund and Microsoft Research India.

TEACHING

- **Graduate Teaching Assistant**, CS 7455: Issues in Human-Centered Computing, Georgia Institute of Technology (Spring 2023)
  - Provided and graded practice questions for PhD students preparing for qualifying exams
- **Graduate Teaching Assistant**, CS 3001: Computing and Society, Georgia Institute of Technology (Fall 2022)
  - Led two discussion sections for undergraduate course surveying topics on computing and ethics

SERVICE

- **Student Volunteer**, ICTD 2022
- **Student Volunteer**, CSCW 2021
- **Student Volunteer**, FAccT 2021