Ian René Solano-Kamaiko

él/he/him
irs24@cornell.edu
https://iansolano.com

Research Interests

My research lies at the intersection of human-computer interaction (`HCI`), responsible artificial intelligence (`R/AI`), and digital health equity. I design, build, and evaluate sociotechnical systems that enable positive social transformation for underserved communities. Specifically, my work centers on computing in high-stakes healthcare settings, with an aim at addressing how social determinants of health contribute to inequities faced by community and home healthcare workers.

Education

2022-present

Ph.D. in Information Science (minor in Computer Science)
Cornell Tech, New York, NY, USA
Committee: Dr. Nicola Dell (chair), Dr. Aditya Vashistha, Dr. Deborah Estrin

2020-2022

M.S. in Computer Science
New York University, New York, NY, USA
Thesis: Contextual Equity Tools: Technology Heuristics To Support Human Decision Making In STEM Admissions
Advisor: Dr. Julia Stoyanovich

2008-2012

B.F.A. in Painting (minor in Art History)
Pratt Institute, Brooklyn, NY, USA

Publications

2025

Ian René Solano-Kamaiko, Michael Dicinigaitis, Melissa Tan, Irene Yang, Kexin Cheng, Ronica Peramsetty, Michelle Shum, Yanira Escamilla, Jennifer Bayly, Meghan Reading Turchioe, Ariel Avgar, Aditya Vashistha, Nicola Dell, Madeline R. Sterling. "Feasibility, Acceptability, and Perspectives Towards the use of Activity Tracking Wearing Devices among Home Health Aides". In Progress.

2025

Ian René Solano-Kamaiko, Melissa Tan, Irene Yang, Kexin Cheng, Ronica Peramsetty, Michelle Shum, Yanira Escamilla, Ariel C. Avgar, Madeline Sterling, Aditya Vashistha, Nicola Dell. "'This is eye opening:' Raising Awareness of Home

Care Workers' Health and Wellbeing via Activity Tracking". Proceedings of the *2025 ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW '25)*.

2025   **Ian René Solano-Kamaiko**, Melissa Tan, Joy Ming, Ariel C. Avgar, Aditya Vashistha, Madeline Sterling, Nicola Dell. "'Who is running it?' Towards Equitable AI Deployment in Home Care Work". Proceedings of the *2025 ACM Conference on Human Factors in Computing Systems (CHI '25)*.

2024   **Ian René Solano-Kamaiko**, Dibyendu Mishra, Nicola Dell, Aditya Vashistha. "Explorable Explainable AI: Improving AI Understanding for Community Health Workers in India". Proceedings of the *2024 ACM Conference on Human Factors in Computing Systems (CHI '24)*.

2023   Mona Sloane, **Ian René Solano-Kamaiko**, Jun Yuan, Aritra Dasgupta, and Julia Stoyanovich. "Better Transparency: Introducing Contextual Transparency for Automated Decision Systems". *Nature Machine Intelligence.*

2022   Andrew Bell, **Ian René Solano-Kamaiko**, Oded Nov, and Julia Stoyanovich. "It's Just Not That Simple: An Empirical Study of the Accuracy-Explainability Trade-off in ML for Public Policy". Proceedings of the *2022 ACM Conference on Fairness, Accountability, and Transparency (FAccT '22)*.

Research Experience

2022-Present   **Graduate Research Assistant**
Cornell Tech, New York, NY, USA
Advised by Dr. Nicola Dell and Dr. Aditya Vashistha

2023-Present   **Visiting Research Scholar**
2021-2023   **Graduate Research Fellow**
Center for Responsible AI at NYU, Brooklyn, New York, USA
https://airesponsibly.com
Advised by Dr. Julia Stoyanovich

2021–2022	**Graduate Research Assistant**
	New York University, New York, NY, USA
	Advised by Dr. Julia Stoyanovich and Dr. Oded Nov

Fellowships & Awards

2023–2024	**Digital Life Initiative (DLI) Doctoral Fellowship**
2022	**Fellowships at Auschwitz for the Study of Professional Ethics (FASPE)**

Invited Talks

2025	**AI Care Tour Panel,** National Domestic Workers Alliance (NDWA)
2024	**Health Equity Symposium,** Cornell Center for Health Equity
2024	**Digital Life Seminar,** Digital Life Initiative at Cornell Tech
2022	**Tech Ethics Panel,** Data Science Education Community of Practice (DSECOP)
2022	**AI Documentation Expert Summit,** Data Nutrition Project

Teaching

2022	**Teaching Assistant**, INFO 6410 / CS 5682: HCI and Design
	Cornell Tech, New York, NY, USA
	Dr. Nicola Dell and Dr. Thijs Roumen
2021	**Lead Teaching Assistant**, CS-GY 6083: Principles of Database Systems
	New York University, New York, NY, USA
	Dr. Julia Stoyanovich

Service

2025	ACM CSCW, Reviewer
2024–2025	Clinic to End Tech Abuse (CETA), Volunteer
2024–2025	ACM CHI, Reviewer
2022–2025	NYU Applied Research Innovations in Science and Engineering (ARISE), Selection Committee Member
2023	Cornell Specialization Project (iMPACT), Team Advisor
2022–2025	Cornell Student-Applicant Reading Program (SARP), Reviewer

Mentorship

2024-2025 Irene Yang (MS Student, Cornell Tech)

2024 Kexin Cheng (MS Student, Cornell Tech)

2023-2025 Melissa Tan (MS Student, Cornell Tech)

2023 Pamela Pan (MS Student, Cornell Tech -> Product Marketing, Cloudera)

2023 Haitong Lin (MS Student, Cornell Tech -> PhD Student, NYU)

2023 Jingjing Ye (MS Student, Cornell Tech -> Product Owner, Digital Polygon)

2023 Novia Wu (MS Student, Cornell Tech -> Software Engineer, Arista Networks)

Industry Experience

2019-2020

Software Engineer
Opentrons, Brooklyn, NY, USA
https://opentrons.com

I worked as a member of the Platform team building and managing our open-source software. We focused on developer experience, interoperability, and cloud infrastructure. I worked on our public APIs built using Python with FastAPI and Pytest. Additionally, I supported efforts on our desktop and web applications using technologies such as Electron, Node.js, React, Flow.js, and Jest.

2017-2019

Lead Software Engineer
Clark, New York, NY, USA
https://hiclark.com

As a member of the engineering team I helped establish our technical direction, lead/participated in research initiatives, onboarded new hires, and mentored junior members. Clark's APIs were built using Ruby on Rails based on the JSON API spec and tested using Rspec. Our frontend clients were built using React, Redux, Styled-Components, Flow.js, Jest/Enzyme, and Node.js.

2017

Product Engineer
Mic, New York, NY, USA
https://mic.com

I was part of the team responsible for the Mic.com web application rebuild. Mic.com was rebuilt using server-side rendered React, Redux, Graphql, Flow.js, Chai/Enzyme, Node.js, and Kubernetes for deployment orchestration.

2014-2017   **Product Engineer**
Made by Many, New York, NY, USA
https://madebymany.com

I worked as part of an interdisciplinary team researching, prototyping, and building complex web and mobile applications. I built a mobile application using React Native and web applications using technologies such as React, Redux, Elixir/Phoenix, and Ruby/Ruby on Rails.

2013-2014   **Technologist**
Big Spaceship, Brooklyn, NY, USA
https://bigspaceship.com

I collaborated with designers, strategists, data analysts, and technologists to create compelling campaign websites and web applications.

Skills

Languages   JavaScript (ES6+/Node), Typescript, Ruby, Python, Elixir, Haskell, C++, HTML, CSS, Bash, SQL, Spanish

Libraries   React, React Native, Redux, Graphql, Electron, Ruby on Rails, Rspec, Jest, Cypress, FastAPI, Pandas, NumPy, Scikit-learn, SHAP, AI Fairness 360, Fairlearn, Pytest, Phoenix, Next.js, Styled-Components

Databases   PostgreSQL, MySQL, MongoDB, Redis

Research   User interviews, survey design, ethnographic observations, affinity mapping, journey mapping, service blueprints, personas, A/B testing, prototyping