Gloire Rubambiza

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Computing and Information Science (CIS)
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Education

Cornell University	Ph.D., **Computer Science**	2018 - 2024 (Expected)
Grand Valley State University	B.S., **Computer Science**	August 2014 - April 2018

Research Interests

Systems & Networking, Information and Communication Technologies for Development (ICTD)

Publications

Workshop Papers

- **Gloire Rubambiza**, Phoebe Sengers, and Hakim Weatherspoon, "Paradoxes in Producing the Future of Farm Work: Anticipating Social Impact through the Lens of Early Adopters", *Automation Experience at the Workplace* Workshop at CHI '21, Yokohama, Japan, May 2021

Technical Reports

- Danny Adams, **Gloire Rubambiza**, Pablo Fiori, Xinwen Wang, and Hakim Weatherspoon and Robbert Van Renesse, "Tamperproof Provenance-Aware Storage for Mobile Ad Hoc Networks", 2020. Technical Report.

Extended Abstracts

- **Gloire Rubambiza**, Hakim Weatherspoon, José Martínez, and Abraham Stroock, "Water-Guard: Toward Cheap Automated Irrigation Systems Powered by the Cloud and TV White Spaces", CMD-IT/ACM Richard Tapia Celebration of Diversity in Computing Conference (TAPIA '20), Dallas, TX, September 2020

- Martin Matias Perez, **Gloire Rubambiza**, Brandon Barker, Hakim Weatherspoon, and Julio O. Giordano,"Automated real-time integration of data from multiple sensors and nonsensor systems for prediction of dairy cow and herd status and performance", *Journal of Dairy Science*, Vol. 103, Suppl. 1, 2020

- Kolbeinn Karlsson, Danny Adams, **Gloire Rubambiza**, Zangyueyang Xian, Robbert Van Renesse, Hakim Weatherspoon, and Stephen Wicker, "Untethered: Deployable Blockchains for IoT Environments", *In Proceedings of the ACM Symposium on Cloud Computing (**SoCC '18**)*, Carlsbad, CA, October 2018

Research Talks

- **Gloire Rubambiza**, Phoebe Sengers, Hakim Weatherspoon "Paradoxes in Producing the Future of Farm Work: Anticipating Social Impact through the Lens of Early Adopters", IBM Hybrid Cloud Academic Project Forum (Virtual), Ithaca, NY, July 2021

- **Gloire Rubambiza**, Phoebe Sengers, Hakim Weatherspoon "Paradoxes in Producing the Future of Farm Work: Anticipating Social Impact through the Lens of Early Adopters", FarmBeats User Community Workshop (Virtual), Ithaca, NY, March 2021

- **Gloire Rubambiza**, "Towards a Software-Defined Farm", Cornell Life Sciences Lecture Series, Ithaca, NY, September 2019

- **Gloire Rubambiza**, Dirk Grunwald, and Eric Wustrow, "Measurement and Statistical Analysis of Submarine Internet Cable Performance.", Leadership Alliance National Symposium, Hartford, Connecticut, July 2017

- **Gloire Rubambiza**, Jerry Scripps, "Improving African Internet Traffic through Maximization of Node Centrality.", 22nd Annual University at Buffalo McNair Summer Research Conference, Buffalo, New York, August 2016

Posters

- **Gloire Rubambiza**, Hakim Weatherspoon, José Martínez, and Abraham Stroock. "Toward Cheap Automated Irrigation Systems Powered by the Cloud and TV White Spaces." CMD-IT/ACM Richard Tapia Celebration of Diversity in Computing Conference, Dallas, TX, September 2020

- Danny Adams, **Gloire Rubambiza**, Xinwen Wang, Robbert Van Renesse, and Hakim Weatherspoon, "An IoT-friendly Blockchain for Coordination and Accountability." The Cornell, Maryland, Max Planck Pre-doctoral Research School, Saarbrücken, Germany, August 2019

- Danny Adams, **Gloire Rubambiza**, Xinwen Wang, Robbert van Renesse, and Hakim Weatherspoon. "An IoT-friendly Blockchain for Coordination and Accountability." Public Safety Broadband Stakeholder Meeting (PSCR), Chicago, IL, July 2019

- **Gloire Rubambiza**, Dirk Grunwald, and Eric Wustrow, "Measurement and Statistical Analysis of Submarine Internet Cable Performance." Grand Valley State University Student Scholars Day, Allendale, MI, April 2018

- **Gloire Rubambiza**, Dirk Grunwald, and Eric Wustrow, "Measurement and Statistical Analysis of Submarine Internet Cable Performance." Michigan AGEP Alliance Fall Conference, Lansing, MI, October 2017

Honors and Awards

NSF-NRT Digital Plant Science Fellowship	2020 - 2022
Microsoft Digital Agriculture Fellowship	Summer 2020
NSF-GRFP Honorable Mention	2020
Diversifying LEAdership in the Professoriate (LEAP) Fellowship	2018 - 2024
Cornell University Fellowship	2018 - 2019
Upsilon Pi Epsilon Honor Society	2017 - 2018
Eric Jon Gillette Memorial Scholarship	2016 - 2018
Ronald E. McNair Scholar	2015 - 2018
Rivertown Community Commitment Scholarship	2014 - 2015

Travel Grants

ACM Symposium on Operating Systems Principles (SOSP 2019)	October 2019
Computing Research Association 2019 URMD Grad Cohort	March 2019
ACM Symposium on Cloud Computing (SoCC 2018)	October 2018

Industry Experience

IBM   Research Intern   May 2021 - August 2021

- Designed and implemented a Kubernetes-native web app for data mining of EDA worker logs

- Research results uncovered $11,000 in potential AWS cloud consumption savings per week

Collective Idea   Software Development Intern   August 2016 - December 2016

- Developed a predictive cron job failure algorithm for the Dead Man's Snitch application

- Pair-programmed with senior developers on in-house projects such as add.a.lingua

Teaching Experience

Pre-Sophomore Summer Program in Computer Science (CS 3410)   June 2020

- Led 5 lab sections and office hours

- Delivered a mini-lecture on C pointers

CS 3410 - Computer System Organization and Programming   Spring 2020

- Led 2 weekly lab sections and office hours

- Coordinated projects and exam review sessions with a team of four undergraduate TAs

SoNIC Summer Research Workshop   June 2019

- Conducted user account administration

- Delivered a lecture on parsing Ethernet frames

Undergraduate Research Experience

University of Colorado Boulder SMART Program   June 2017 - August 2017
Advisor: Dr. Dirk Grunwald, Area: Systems
Submarine cables handle approximately 95% of inter-continental Internet traffic. This project aims to elucidate the performance of submarine cables through analysis of metrics such as available bandwidth and packet latency.

Ronald E. McNair Scholars Summer Research Program   May 2016 - August 2016
Advisor: Dr. Jerry Scripps, Area: Networks
For most African nations, a broadband Internet subscription is more than the average per capita yearly income. This project attempts to improve the intra-African Internet traffic using strategic fiber-optic link addition algorithms to increase the closeness of a sample network.

Mentoring and Service

GSGIC/WICC/GradSWE Graduate School Panel   Panelist   April 2021

- Discussed issues of mental health and imposter syndrome as a PhD student
- Offered tips on success before and during the PhD process

Cornell CIS Diversity Council   Graduate Representative   Jan. 2019 - Present

- Advising CIS leadership on diversity and inclusion climate
- Coordinating the Diversity Breakfast during Cornell CS Ph.D Visit Days

Cornell CS PhD Mentoring Program   Mentor   Aug. 2019 - Present

- Acting as a resource to first-year Ph.D. students in their graduate school transition
- Helping mentees navigate and find other resources on campus

Cornell URMC Career Fair Prep   Graduate Reviewer   September 2019

- Critiqued and developed strategies for powerful résumés
- Offered tips on concise and effective elevator pitches

Cornell, Maryland, Max Planck Summer School   Cornell Representative   August 2019

- Engaged top students on the process of applying to Ph.D programs
- Facilitated student introductions to world class faculty at Cornell

SoNIC Summer Research Workshop   Graduate Panelist   June 2019

- Provided insights on life as an underrepresented graduate student in Computer Science
- Discussed strategies for successful graduate school applications

Cornell McNair Scholars Graduate Application Panel   Graduate Panelist   October 2018

- Discussed Ph.D application tips for former McNair Scholars
- Offered negotiation strategies for Ph.D admission offers

Volunteering and Leadership Experience

Skype A Scientist   Graduate Student Volunteer   March 2020 - Present

- Coordinating with K-12 teachers on appropriate guest lecture material
- Delivering guest lectures on computer systems research

IBM P-TECH Program   Presenter   July 2021

- Highlighted mindfulness at work and bias in AI/ML to high school sophomores
- Led discussion on diversity, equity, and inclusion in the computing workforce

The Village at Ithaca   Student Achievement Coach   January 2019 - February 2019

- Introduced new tutors to the structure of community-based learning environments
- Fostered a positive academic learning environment for local K-12 students through one-on-one tutoring support and empowerment through trust based connections

IEEE Computer Society   Registration Desk Volunteer   June 2017

- Helped registrants with checking in and answering any questions pertaining to the 47th IEEE/IFIP International Conference on Dependable Systems and Networks

The Immigrant Connection   Citizenship Class Tutor   January 2017 - March 2017

- Familiarized local immigrants with the U.S citizenship process
- Improved the future citizens' confidence and English literacy through quizzing on American civics and history in anticipation for the U.S. citizenship test

Samaritas   Cultural Mentor/ESL Tutor   September 2016 - December 2016

- Organized weekly English lessons for an immigrant family to strengthen their English speaking and writing skills
- Coordinated occasional trips to downtown Grand Rapids, MI and surrounding areas to familiarize the family with their new environment

GVSU Office of Undergraduate Research & Scholarship   Session Host   April 2016

- Provided ongoing welcome and direction to poster presenters and attendees
- Coordinated with the OURS office to keep presentation rooms on schedule