# Gloire Rubambiza

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### Education

Cornell University Ph.D., Computer Science 2018 - 2023 (Expected)

Grand Valley State University B.S., Computer Science August 2014 - April 2018

### Research Interests

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

#### Research Talks

- 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.", 22<sup>nd</sup> Annual University at Buffalo McNair Summer Research Conference, Buffalo, New York, August 2016

### **Publications**

- 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
- Gloire Rubambiza, Jerry Scripps, "Improving African Internet through Maximization of Node Centrality", McNair Scholars Journal, vol. 20, no.1, pp. 41 45, 2016.

#### **Posters**

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

Sept. 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
- Gloire Rubambiza, Jerry Scripps, "Improving African Internet through Maximization of Node Centrality" Grand Valley State University Student Scholars Day, Allendale, MI, April 2017

# Undergraduate Research Experience

#### University of Colorado Boulder SMART Program

June 2017 - August 2017

Adviser: 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

Adviser: 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.

#### Honors and Awards

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

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# **Industry Experience**

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

SoNIC Summer Research Workshop

Teaching Assistant

June 2019

- Conducted user account administration
- Led a lecture on parsing Ethernet frames at the data link layer

# Mentoring and Service

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

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# Volunteering and Leadership Experience

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

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