F. Megumi Kivuva

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Education

exp. 2027 **Ph.D., University of Washington** Information Science.

2022 **BA, Bard College** in Computer Science and Spanish Studies. *minor:* Experimental Humanities.
Thesis title: *Quien soy yo?: Integrating Computer Science in a Spanish Literature Classroom.*

Certificate, Open Society University Network (OSUN) Civic Engagement.

Research Experience

2021-2022 **Undergraduate Research Assistant.** *University of Washington, Code and Cognition Lab* where I researched emerging critical consciousness in secondary computer science classrooms by teaching a summer class to a diverse group of high school students in Seattle.

2022-present **Graduate Research Assistant.** *The University of Washington's Center for Learning, Computing, and Imagination* where I utilize community participatory research to understand the barriers to accessing computing education and co-design interventions to make computing education more accessible to refugee youth.

Teaching Experience

2022 – present **Volunteer Instructor** *Refugee Women's Alliance* Teach computer science-related lessons to 40 refugee students in grades 3-5. Chaperone field trips and provide homework assistance to students. Translate in Swahili and Spanish when needed.

Summer 2023 **Instructor** *Upward Bound* Taught cultural computational embroidery class for low-income and first-generation 9-12 graders. Students learned to program an embroidery machine using TurtleStitch, a block-based editor built on Snap!.

2019 – 2022 **Media Corps Member** *Bard College Experimental Humanities Department* Taught and developed programming workshops centered around the intersection of literature and programming.

2020, 2022 **Teaching Assistant** *Literature in the Digital Age, Prof. Patricia Lopez-Gay* Taught class once a week for students attending class virtually; developed and taught all curriculum for the programming aspects of the course using Twine and p5.js.

2018 – 2022 **Lead STEM Education Fellow** *Bard College Center for Civic Engagement* Organized and developed STEM educational programming for community partners catering to grades K12 in the Hudson Valley.

Summer 2021 **Teaching Assistant** *Creatively Coding a Better Future, Jayne Everson* Collaborated on curriculum, assessment development, and grading for a summer course for low-income and first-generation high school students in the Upward Bound program.

2014-2018 **Lead Intern** *Fund for the Advancement of Minorities through Education (FAME)* Taught pre-algebra to 15 seventh-grade students from varying academic backgrounds; planned week-long enrichment trips to universities and companies to expose students to different career paths; managed and trained new interns.

Publications

NOTE: In computing education, conferences are subject to a rigorous peer review, equating them with journal articles in significance. Typical acceptance rates are around 25-30% for SIGCSE and about 20-25% for ICER.

1. F. M. Kivuva, J. Everson, C. Montes De Haro, and A. J. Ko, "Cultural-centric computational embroidery," in *Proceedings of the 55th ACM Technical Symposium on Computer Science Education V. 1*, ser. SIGCSE 2024, , Portland, OR, USA, Association for Computing Machinery, 2024, pp. 673–679, ISBN: 9798400704239. DOI: 10.1145/3626252.3630818.

2. F. M. Kivuva, K. O'Hara, and A. J. Ko, "Exploring identity through computing integration in a spanish language & literature class," Atlanta, Georgia, 2023.

3. J. Everson, F. M. Kivuva, and A. J. Ko, "A key to reducing inequities in like, AI, is by reducing inequities everywhere first: Emerging critical consciousness in a Co-Constructed secondary CS classroom," en, in *Proceedings of the 53rd ACM Technical Symposium on Computer Science Education*, Providence RI USA: ACM, Feb. 2022, 209–215 [BEST PAPER].

4. F. Megumi Kivuva, "Quién soy yo? [who am i?]: Exploring identity through analyzing Afro-Cuban poetry and creative coding in a Post-Secondary spanish literature classroom," M.S. thesis, Bard College, 2022.

5. A. Oleson, B. Xie, J. Salac, J. Everson, F. M. Kivuva, and A. J. Ko, "A decade of demographics in computing education research: A critical review of trends in collection, reporting, and use," en, in *Proceedings of the 2022 ACM Conference on International Computing Education Research V.1*, Lugano and Virtual Event Switzerland: ACM, Aug. 2022, pp. 323–343.

Awards and Achievements

2023 **National Science Foundation Graduate Research Fellowship (NSF GRFP):** 3 years of PhD funding over 5 years.

2022 **William J. Lockwood Prize:** Awarded to the student who has had the most impact on the welfare of Bard College.

2021 **Experimental Humanities Department Student Spotlight:** Highlighted for work in Experimental Humanities.

Association of Episcopal Colleges' Charitable Service Scholar: Awarded to the student who is engaged in volunteer service in their campus community and beyond.

2020 **Berta and Herold J. Dresher Scholarship:** Awarded to a student for their high moral and intellectual stature.

2017 **Outstanding Intern:** Fund for the Advancement of Minorities through Education.

Love Award: $10,000 travel grant to study arts and social change in Nicaragua and Cuba.

Professional Organizations

2024-present **Computer Science Teachers Association (CSTA):** Member of the Washington State Chapter of CSTA, an organization dedicated to broadening participation in computing education.

2021–present **Association of Computing Machinery (ACM):** Student Member of ACM a prominent computing publication venue.

Skills

Languages Strong reading, writing, and speaking competencies in **English, Spanish, Swahili**.

Coding Java, Python, R, C, C++, HTML, JavaScript, LaTeX

References

Available on Request