

Curriculum Vita

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APPOINTMENTS

University of California—Berkeley, CA, USA Graduate Student Researcher. PIs: Michelle Wilkerson and Kris Gutiérrez Mentored Research Fellow (2020-2021); Writing Data Stories NSF #1900606.	2018-Present
Krikey, Inc., CA, USA User Experience Researcher.	2020
Boston College, MA, USA Graduate Student Researcher. PI: George M. Barnett Diversity Fellow (2018); Seeding the Future of STEM Researchers NSF #1759152.	2017-2018
Cornell University, NY, USA Undergraduate Research Assistant, Development Sociology.	2015-2016

EDUCATION

University of California—Berkeley, CA, USA Ph.D. Student, Learning Sciences and Human Development.	Present
Boston College, MA, USA Master's Student, STEM Education and Learning Sciences.	2018
Cornell University, NY, USA B.A. Physics	2016

PUBLICATIONS

IN PROGRESS

Ito, M., **Roberto, C.**, & Wilkerson, M. (In Press). Critical consciousness, personal stories, and making choices as historical actors in an anti-colonial framed videogame. In *The Berkeley McNair Research Journal*.

Roberto, C. (In Progress). Disciplinary resistance in a storied math game. In preparation to be submitted to *Information and the Learning Sciences*.

Roberto, C. (In Progress). A-im for Abstract Thinking: Applying abstraction to designerly thinking in the STEM disciplines. In preparation to be submitted to the *Journal of Science and Technology Education*.

Wilkerson, M., **Roberto, C.**, Lanouette, K., Lopez, M. L., & Gutiérrez, K. (Invited/Under Review). Tensions in designing for critical computational data engagements. [Special Issue]. *Transactions in Computing Education*.

Lopez, M. L., Rivero, E., **Roberto, C.**, Reigh, E., Wilkerson, M., Gutiérrez, K., Cortes, K., & Lanouette, K. (Invited/In Progress). Syncretism as generative epistemic dis-obedience: findings from working with nondominant youth to develop sociocritical data literacies. *Mind, Culture, and Activity*.

GRANTS AND AWARDS

INTERNAL GRANTS AWARDED

Mentored Research Fellowship (\$21,000)	2020
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Continuing Students Fellowship (\$10,000)	2020
Graduate School of Education Fellowship (\$40,000)	2018

AWARDS AND COMPETITIVE TRAVEL GRANTS

Best Student Paper 2020 Award Honourable mention SIG LS and SIG ATL	2020
UC Berkeley Conference Travel Grant (\$1,500)	2019
Major League Hacking Ethical Hack Finalist	2018

REFEREED CONFERENCE PROCEEDINGS

Lopez, M. L., **Roberto, C.**, Rivero, E., Wilkerson, M., Bakal, M., & Gutiérrez, K. (2021, under review). Curricular reorganization in the third space: a case of consequential reasoning around data. Under Review for *International Conference of the Learning Sciences*.

Roberto, C. (2020). Supporting critical CS identity in an anti-colonial video game. In Gresalfi, M. and Horn, I. S. (Eds.), *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020*, Volume 2 (pp. 889-890). Nashville, Tennessee: International Society of the Learning Sciences.

Lanouette, K., Rivero, E., Barton, J., Bulalacao, N., Lopez, M. L., Cortes, K., **Roberto, C.**, Gutiérrez, K., Wilkerson, M. H., Lee, H., Stokes, D.*, Finzer, W., Erickson, T., Petrosino, T., Haldar, L. (2020). Writing data stories: Reauthoring scientific data through syncretic computational investigations in middle school science. In C. Matuk & S. Yoon (Orgs.) and J. Polman (Disc.), *Data literacy for social justice. In Proceedings of the 14th International Conference for the Learning Sciences (ICLS 2020)*. Nashville, TN, USA: ISLS.

Wilkerson, M. H., **Roberto, C.**, & Bulalacao, N. (2020). Debugging data: Diagnosing, evaluating, and repairing data for analysis. In Y. Kafai (Org.) & J. Danish (Disc.), *Turning bugs into learning opportunities: Understanding debugging processes, perspectives and pedagogies. In Proceedings of the 14th International Conference for the Learning Sciences (ICLS 2020)*. Nashville, TN, USA: ISLS.

Semerjian, A. & **Roberto, C.** (2019). Impacts to students of infused computational-thinking, problem-based-learning science curriculum: engagement, opportunity to learn, interest, and identity. In Lund, K., Niccolai, G. P., Lavoué, E., Hmelo-Silver, C., Gweon, G., & Baker, M. (Eds.), *A Wide Lens: Combining Embodied, Enactive, Extended, and Embedded Learning in Collaborative Settings, 13th International Conference on Computer Supported Collaborative Learning (CSCL) 2019*, Volume 2 (pp. 951-952). Lyon, France: International Society of the Learning Sciences.

INVITED TALKS

ACADEMIC PRESENTATIONS

Berkeley Institute of Design. (December, 2020). Why games in computing curricula, new directions. At the *Algorithms in Computing Education Colloquia*.

Berkeley Institute of Design. (November, 2019). Critical CS identities as youth become designers of social futures. At the *Algorithms in Computing Education Colloquia*.

Massachusetts Institute of Technology (MIT) Media Lab. (October, 2017). Integrating Node.Py framework with MIT App Inventor. At the *MIT App Inventor research group*.

REFEREED CONFERENCE PRESENTATIONS

PAPER PRESENTATIONS

Roberto, C. & Davis, G. (2020). Reimagining narratives, rewriting code: computer science and math identity development in an anti-colonial video game. Presented at the 2020 Annual Meeting of the American Educational Research Association (AERA), San Francisco, CA, April 17-21. SIG Learning Sciences/Advanced Technologies for Learning Best Student Paper Award Honorable Mention.

POSTERS, DEMOS, & OTHER PRESENTATIONS

Roberto, C., Shaw, M., Semerjian, A. & Lopez, M. L. (2020). Exploring new research in critically reclaiming STEM+C identity and imagination. *In Proceedings of the Learning Sciences Graduate Student (LSGS) Conference 2020: Finding Your Place in the Learning Sciences Community*. Madison, WI, November 13-15.

Xu, Y., **Roberto, C.**, & Rupani, R. (2017). Connect everyone, everything, everywhere with Node.Py: a framework for engaging learners in cloud computing using Python. *At the 7th Annual FabLearn Conference on Creativity and Fabrication in Education*. Association for Computing Machinery, New York, NY, USA.

SOFTWARE PRODUCTS (open source code available for starred items)

Guaiya Means Love* A computing game simulating Indigenous activism.	2018-Present
ModFox (with Serena Meghani) A computing game inviting players to modify game code.	2018
iLet (with SheHacks collaborators) A wearable technology for memory loss patients. <u>Major League Hacking Finalist</u> .	2018
Node.Py (with Paul Xu and Raj Rupani) A framework for supporting beginners in Python.	2017-2018

TEACHING

COURSES

EDUC 243: Advanced Qualitative Research Methods <i>Graduate Student Instructor under Kris Gutiérrez</i>	FA20
UGIS c122: Research Methods in STEM Education <i>Graduate Student Instructor under Michelle Wilkerson</i>	SP20

K-12 Teaching

<i>Overfelt High School. San Jose, CA. 6th-12th Grade.</i> Algebra 1 Introduction to Computer Science Advanced Placement Computer Science After School Advising: Video game design club	2016-2017
<i>Roaring Forks School District. Carbondale, CO. 6th-8th Grade.</i> Physics of Musical Sound	2015

ADVISING

UNDERGRADUATE MENTEES

Aidan Tan, Spencer Le (URAP Computer Science)	2020-Present
Maya Ito (McNair Scholars)	2020-Present
Brad Villacis, Rachel Lau (CalTeach Project)	2020
Marcus Pasimio, Jia Xin Sun (URAP Qualitative Methods)	
Amber Yada, Anam Ahmed, Mark Zerrudo, Xinyu (Celia) Wei, Carolina Villegas (URAP Qualitative Methods)	2019-Present
Daria Karraby, Taylor Redmond (URAP Qualitative Methods)	2018-2019

SERVICE

EXTERNAL COMMITTEES AND PANELS

Volunteer teach-in: *pro-Indigenous STEM4COLA workshop*

REVIEWING [AD HOC]

Constructionism

American Educational Research Association (AERA)

Learning Sciences Graduate Student Conference