- MAYA E. CARRASQUILLO -

ASSISTANT PROFESSOR OF CIVIL & ENVIRONMENTAL ENGINEERING UNIVERSITY OF CALIFORNIA, BERKELEY

CONTACT

E-mail: mcarrasquillo@berkeley.edu Website: http://mayaecarrasquillo.com

Twitter: @drmayaelizabeth

PROFESSIONAL APPOINTMENTS

2021- Present Assistant Professor of Environmental Engineering

University of California, Berkeley

Department of Civil and Environmental Engineering

2020 – 2021 Management Consultant

Arcadis U.S., Atlanta, GA

Water Business Line and Business Advisory

2015-2016 Global Diversity and Inclusion Strategy and External Alliances

Graduate Intern

Intel Corporation, Chandler, AZ

K-12 Outreach and Partnership with Oakland Unified School District (OUSD)

EDUCATION

2015 - 2020 Ph.D. in Environmental Engineering

University of South Florida

Advisor: Maya A. Trotz, Civil and Environmental Engineering

Dissertation: Black Lives Matter in Engineering, Too! An Environmental Justice Approach towards Equitable Decision-Making for Stormwater

Management in African-American Communities

2010 - 2015 B.S. in Environmental Engineering, Honors Program

Minor in History

Georgia Institute of Technology

Advisor: Ching-Hua Huang, Civil and Environmental Engineering

HONORS AND AWARDS

2021 - present	College of Engineering Hueslkamp Faculty Fellow
2019	Florida Water Resources Conference, 1st Place Poster Competition
2018 - 2019	Water Environment Federation InFLOW Scholar
2018	GT AASU 50th Anniversary Community Service Award

2015 - 2020	Florida Education Fund McKnight Doctoral Fellowship
2015 - 2020	Alfred P. Sloan Minority PhD Scholarship
2015 - 2018	National GEM Consortium Fellowship
2014	NACME Undergraduate Research Fellowship in Green Technology
2013 - 2015	National Action Council for Minorities in Engineering Scholarship
2012 - 2015	Louis Stokes Alliance for Minority Participation Research Scholar
2013	Caterpillar Rising Inspirational Students in Engineering (RISE) Scholarship

PUBLICATIONS

- 1. **Carrasquillo, M**. (2020). "Black Lives Matter in Engineering, Too! An Environmental Justice Approach towards Equitable Decision-making for Stormwater Management in African American Communities, Theses and Dissertations.
- 2. Henderson, M., **Carrasquillo, M**., Birt, L., Furneaux, A., Storino, L., Dunn, N., Venner, I., Trotz, M. (2020). Diversity and Inclusion Professional Societies Case Study. Water Environment Federation 2020 Technical Exhibition and Conference (WEFTEC).
- 3. **Carrasquillo, M.,** Ortiz, E., Trotz, M. (2019). Environmental justice and stormwater management: A Tampa case study towards multi-functional stormwater infrastructure in coastal communities of color. Water, Health, and Environmental Justice in Marginalized Communities. American Chemical Society 2019 Fall National Meeting. San Diego, CA, August 25, 2019.
- 4. National Environmental Justice Advisory Council. (2018). Youth Perspectives on Climate Change Work Group: Best Practices for Youth Engagement and Addressing Health Impacts of Climate Change, EPA Office of Environmental Justice, Retrieved from (https://www.epa.gov/sites/production/files/2018-10/documents/nejac youth perspectives on climate change report.pdf.)
- 5. Renew, J. E., Huang, C.-H., Burns, S. E., **Carrasquillo, M.,** Sun, W., Ellison, K. M. (2016). Immobilization of Heavy Metals by Solidification/Stabilization of Co-Disposed Flue Gas Desulfurization Brine and Coal Fly Ash. Energy and Fuels, 30(6).
- 6. Renew, J.E., Huang, C.H., Burns, S., **Carrasquillo, M**., Ellison, K. Immobilization of Heavy Metals by Solidification/Stabilization in Co-Disposed Coal Fly Ash and Flue Gas Desulfurization Wastewater Brines. International Water Conference. 13(12). Nov.2013.

PUBLICATIONS (IN PREPARATION)

- 7. **Carrasquillo, M.**, Hossain Oyshi, F., Jackson, A.T., Ward, B., Trotz, M. "Green Infrastructure, Environmental Justice and Black America: Assessing the distributional and procedural justice of Green Stormwater Infrastructure in Washington, D.C. and Atlanta, GA. (in preparation)
- 8. **Carrasquillo, M.**, Trotz, M. "An Examination of The History, Perceptions and Management of Stormwater Infrastructure in East Tampa, Florida." (in preparation)

INVITED LECTURES

1. Carrasquillo, M. Green Infrastructure, Environmental Justice, and Black America. Geography Fall 2021 Colloquium, *University of Iowa*. May 5, 2022. (Invited Lecture)

- **2. Carrasquillo, M.** The role of developing an "engineering identity" in centering justice and liberation in decision-making for water infrastructure. Inaugural Humanitarian Engineering and Science Graduate Student Lecture Series. Humanitarian Engineering and Science, *Colorado School of Mines*. April 21, 2022. (Distinguished Guest Lecture).
- 3. Carrasquillo, M. The role of developing an "engineering identity" in centering justice and liberation in decision-making for water infrastructure. Diversity, Equity and Inclusion Seminar Series, Engineering and Public Policy, Carnegie Mellon University. March 18, 2022. (Invited Guest Lecture)
- **4. Carrasquillo, M.** Green Infrastructure, Environmental Justice, and Black America. Geography Fall 2021 Colloquium, *University of California, Berkeley*. December 1, 2021. (Invited Lecture)
- 5. **Carrasquillo, M.** Inclusive Infrastructure for Stormwater Management: An Environmental Justice Approach towards Equitable Decision-making in Historically Resilient Communities. Green Stormwater Infrastructure Opportunities and Challenges in the Era of Climate and the Pursuit of Justice, *Environmental Science & Technology (ES&T) Global Seminar Series*, November 11, 2021. (Invited Lecture)
- **6. Carrasquillo, M.** Engineering Identity as a pathway to centering equity and justice in decision-making for water infrastructure design and implementation. Civil and Environmental Engineering Seminar Series, *University of California, Davis*. November 9, 2021. (Invited Lecture)
- **7. Carrasquillo, M.** The role of developing an "engineering identity" in centering justice and liberation in decision-making for water infrastructure. Energy Engineering Seminar Series, *University of California, Berkeley.* November 5, 2021. (Invited Lecture)
- **8. Carrasquillo, M.** Establishing an "engineering identity" for the pursuit of water equity in underserved communities. Earth and Environmental Sciences Colloquium, *Wesleyan University*. November 2, 2021. (Invited Lecture)
- **9. Carrasquillo, M.** The role of developing an "engineering identity" in centering justice and liberation in decision-making for water infrastructure. Energy Resource Group Seminar Series, *University of California, Berkeley*. October 13, 2021. (Invited Lecture)
- **10. Carrasquillo, M.** The impact of "green chemistry" on environmental justice. Environmental Chemistry Summer Session, *South Carolina State University*. July 2, 2021. (Invited Virtual Lecture)
- **11. Carrasquillo, M.** Striving towards Justice in Stormwater Management: A Systems Approach for Equitable Decision-making in African American Communities. River Basin Center, Third Wednesday Symposium. *University of Georgia*. April 21, 2021. (Invited Virtual Lecture)

12. Carrasquillo, M. Addressing Inequities in Public Services from the Private Sector. Environment and Water Resources Seminar, *University of South Florida*, March 12, 2021. (Invited Virtual Lecture)

- **13. Carrasquillo, M.** JEDI Engineering: Converging equity and justice for 21st century infrastructure solutions in research, education & practice. *University of Virginia*, Civil and Environmental Engineering. January 14, 2021. (Invited Guest Lecture)
- **14. Carrasquillo, M.** JEDI Engineering: Converging equity and justice for 21st century infrastructure solutions in research, education & practice. Civil and Environmental Engineering, *University of California Berkeley*. December 3, 2020, Berkeley, CA. (Junior Faculty Seminar)
- **15. Carrasquillo, M.** Shifting the Paradigm from "Just" Sustainability to Social Justice: A Case Study towards Equitable Decision-making for Stormwater Management in Coastal African American Communities. Humanitarian Engineering: Engineering, Design and Society Lecture Series, *Colorado School of Mines*. October 1, 2019, Golden, CO. (Invited Guest Lecture)
- **16. Carrasquillo, M.** Social Justice Engineering: Engineering for the Culture, Taste of Science-Tampa Bay, April 24, 2019, St. Petersburg, FL. (Invited Lecture)
- **17. Carrasquillo, M.** Uprooting the Imposter: Journeying to and through Graduate School, A Day in the Life of the Professoriate for Black Women, *Georgia Institute of Technology*, April 18, 2019, Atlanta, GA. (Invited Lecture)
- **18. Carrasquillo, M.** Water Vulnerability and Climate Justice, Presented at *United Nations High Level Political Forum for Sustainable Development*, July 11, 2018, New York, NY. (Invited Lecture)
- **19. Carrasquillo, M.** *Be Peculiar: A Call to Action for the Next 40 Years.* Georgia Tech Society of Black Engineers 40th Anniversary Gala, October 28, 2016, Atlanta, GA. (Invited Lecture)
- **20. Carrasquillo, M.,** M. Trotz. ENVISION Sustainable Communities: An Engineering and Anthropological Approach to Sustainable Development. Presented at *A New Ecology of Education: Teaching in the Anthropocene*, November 4, 2016, Tampa, FL. (Invited Lecture)

CONFERENCE PRESENTATIONS

- 1. Carrasquillo, M. An East Tampa Case Study of Equitable Decision-making for Stormwater Management in Historically Resilient Communities. Urban Heat, Vegetation, and Water Dynamics: New Insights and Implications for Management and Equity I Oral, *American Geophysical Union Fall Meeting* 2021, New Orleans, LA. December 15, 2021. (Invited Oral)
- **2. Carrasquillo, M.** Green Infrastructure and Environmental Justice: A mixed-methods approach to determining equitability of green stormwater infrastructure in U.S. cities. *Georgia Association for Water Professionals Spring 2021 Conference*, Young Professionals Session. April 13, 2021. (Virtual Oral Presentation)

3. Carrasquillo, M., Ortiz, E., Trotz, M. Environmental justice and stormwater management: A Tampa case study towards multi-functional stormwater infrastructure in coastal communities of color. *American Chemical Society Annual Meeting*, August 25, 2019, San Diego, CA. (Invited Oral)

- **4. Carrasquillo, M.** "Environmental Justice, Sustainable Development and Stormwater Management: An East Tampa Case Study." *Association for Environmental Engineering and Science Professors 2019 Conference*, May 16, 2019, Phoenix, AZ. (Poster)
- **5. Carrasquillo, M.,** Trotz, M. "Environmental Justice and Stormwater Management: An East Tampa Case Study Towards Equitable Decision-Making." *2019 National Alliance for Broader Impacts Summit*, May 1, 2019, Tucson, AZ. (Poster)
- **6. Carrasquillo, M.,** Trotz, M. (2019). "Environmental Justice and Stormwater Management: An East Tampa Case Study Towards Equitable Decision-Making." *Florida Water Resources Conference*, April 22, 2019, Tampa, FL. (Poster)
- **7. Carrasquillo, M.,** Trotz, M. A Multi-functional Green Infrastructure Approach to Improving Community Health via Sustainable Food Systems and Crime Prevention. Proceedings of 2018 *Water Research Foundation Conference*, May 6-8, 2018, Atlanta, GA. (Invited Oral)
- **8. Carrasquillo, M.,** Trotz, M. An Environmental Justice Approach to Achieving Sustainability in Communities of Color via Multifunctional Green Infrastructure: An East Tampa Case Study." *McKnight Mid-Year Meeting 2018,* February 23-24, 2018, Tampa, FL. (Invited Oral)
- 9. Carrasquillo, M., Trotz, M. An Environmental Justice Approach to Achieving Sustainability in Communities of Color via Multifunctional Green Infrastructure." *Proceedings of Florida A&M University Energy, Water and Food Nexus International Summit*, Oct. 19-20, 2017, Orlando, FL. (Poster)

WORKSHOPS & PANELS

- **1.** Multidisciplinary Perspectives on Climate Displacement. CalPerformances: Illumination Panel Discussion, *University of California, Berkeley.* April 25, 2022. (Expert Panel Discussion)
- **2.** Identity, Power and Privilege in Humanitarian Engineering and Science. *Colorado School of Mines*, April 22, 2022. (Facilitated Workshop)
- **3.** Perspectives on Employee Activism. *oSTEM Annual Conference 2021: Your Seat at the Table.* October 29, 2021. (Invited Panelist)
- **4.** Diversity and Equal Opportunity in the Tech Industry Panel, Engineers Week, *George Mason University*, February 24, 2021. (Invited Virtual Panel)
- **5. Carrasquillo, M.** Miskel, A. Uncomfortable Conversations with Two Black Women: Addressing Inequities in Public Services. Black Employee Network, Arcadis U.S., February 2, 2021. (Invited Virtual Panel)

TEACHING EXPERIENCE

2022- present Instructor for Inclusive Infrastructure

University of California, Berkeley

Course: CE 290, Special Topics in CEE on Inclusive Infrastructure

Student Feedback:

- "I have learned more information about the differentials in the impact of climate change across communities has been very important in shaping my view of inclusive infrastructure. I think this information has been emphasized by the lectures. My view of how past decisions have impacted communities that have been historically disadvantaged was more limited before taking this class."
- "This class has overall been the most well-organized and engaging course I'm taking this semester. I've also really appreciated opportunities to learn from Dr. C through her lectures, and I've enjoyed the in-class opportunities to learn from my classmates in some of our less structured breakouts (e.g. responding to prompts in breakout discussions rather than projects or discussion boards)."

2020 Teaching Assistant

University of South Florida

Course: CGN 4122/4933, Professional/Ethical Issues in Engineering

2018 – 2020 Graduate Student Mentor

University of South Florida

Course/Program:

CURRENT & FORMER GROUP MEMBERS

Doctoral Students

Name	Expected Graduation	Program
Bavisha Kalyan	2023	Energy, Civil Infrastructure & Climate
Fouzia Hossain Oyshi	2026	Environmental Engineering
J'Anna-Mare Lue	2026	Environmental Engineering
Natalie Alvarado	2027	Energy, Civil Infrastructure & Climate
Jasmine McAdams	2027	Energy Resources Group

Masters Students

Name	Dates	Program
Kristida Chhour	2022	Environmental Engineering
Jordan French	2021-22	Environmental Engineering
Monica Gurung	2022	Environmental Engineering

Undergraduate Student Researchers

Name	Dates	Program
Hanifah Abatcha	2022-23	Mechanical Engineering
Nanthaya Verweij	2022-23	Civil and Environmental Engineering

Vida Sanchez	2022	Chemistry
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Graduate Committ	tees
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Name	Expected Graduation	Program (*PhD, +M.S.)
Estenia Carabantes Ortiz*	2023	Environmental Engineering, USF
Tvetene Carlson*	2024	Environmental Engineering, UCB
Sarah Nordahl*	2024	Energy, Civil Infrastructure & Climate, UCB
Matthew Falcone*	2025	Environmental Engineering, UCB
Charmian Molina+	2022	Master of Development Practice, UCB
Nia Jones+	2022	Energy Resources Group, UCB

PROFESSIONAL ACTIVITIES & SERVICE

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2021 – present	Climate Science and Projections Working Group New York City Panel on Climate Change
2018 – 2020	Planning and Evaluation Sub-committee Chair <i>East Tampa Community Revitalization Partnership</i>
2016 - 2018	Youth Group on Climate Change National Environmental Justice Advisory Council
2016 - 2017	National Executive Board Pre-College Initiative Chair National Society of Black Engineers

Conference Organization, Chairing & Moderating

- 1. Co-Chair and Moderator, WEF Public Health and Water Conference & Wastewater Disease Surveillance Summit, Cincinnati, OH, March 21-24, 2022
- **2.** Moderator, Diversity and Inclusion Professional Societies Case Study. Water Environment, WEF Technical Exhibition & Conference,

Outreach

- **1.** Women's History Month Fireside Chat with Suisun Elementary. March 31, 2022. (Virtual Workshop)
- **2.** Green Infrastructure Instruction and Tours with Skyline High School. Youth, Plan, Learn, Act, Now (Y-PLAN). Oakland, CA.
- 3.
- **4.** Judge for the Stockholm Junior Water Prize (SJWP). Water Environment Federation. June 2021.
- **5.** Stormwater and Green Infrastructure Co-instructor. Corporation to Develop Communities Tampa Vocational Institute Green Certification Program. Tampa, Fl. 2017-2020.

6. Speaker for Tampa Bay Alumnae Chapter of Delta Sigma Theta Inc. Career Expo. "Building Wakanda: Engineering and S.T.E.A.M. Pathways to Reimagining Our Future." Middleton High School, Tampa, FL. September 22, 2018.

Professional Affiliations

Association for Environmental Engineering and Science Professors (AEESP)
American Society of Civil Engineers
American Society for Engineering Education
Water Environment Federation
National Alliance for Broader Impact
American Association of Anthropologists