

## CURRICULUM VITAE

### Carol Maione

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#### EDUCATION

- 2020-ongoing Politecnico di Milano, Department of Management, Economics and Industrial Engineering (DIG)**  
(Milan, Italy)  
**Ph.D. Candidate**
- Research scope: comparative analysis of the plastic industry in Italy (Lombardy), South Africa (Western Cape), and China (Beijing) to map the spatial distribution and system dynamics of industrial actors, quantify plastic material flows (direct and waste streams), and assess the related ecological impacts.
- 2017-2019 University of Michigan, School for Environment and Sustainability (SEAS)** (Ann Arbor, Michigan)  
**M.S., Environment and Sustainability, GPA 4.0/4.0**
- Dissertation title: *Emergence of plastic pollution on tourism beaches in Zanzibar, Tanzania.*
  - Research scope: mapping material flows of solid waste produced by local industries and plastic leakages into the environment to understand the contributions of the tourism industry to plastics waste generation.
- 2015-2016 Politecnico di Milano, Department of Architecture and Urban Studies (DAStU)** (Milan, Italy)  
**M.S., Urban Planning and Policy Design, GPA 110/110**
- Dissertation title: *Reducing the Urban Metabolism of Informal Settlements. Implementing a community-based waste management in Kibera, Nairobi.*
  - Research scope: mapping urban flows throughout informal settlements and existing recycling activities to design a punctual waste collection for plastic materials.
- 2011-2014 Politecnico di Milano, Department of Architecture, Built Environment and Construction Engineering (ABC)** (Milan, Italy)  
**B.S., Architecture and Building Construction**
- Relevant projects: Environmental Impact Assessment of waste-based biofuel technologies.

#### JOB POSITIONS

- 09/2019-present Politecnico di Milano, Department of Management, Economics and Industrial Engineering (DIG)**  
(Milan, Italy)  
**Teaching Assistant**
- Prepared class material and assignments; supervised students on final projects; contributed to grading.
- 11/2019-11/2020 Politecnico di Milano, Department of Management, Economics and Industrial Engineering (DIG)**  
(Milan, Italy)  
**Research Fellow**
- Contributed to grant application at national/international level and scientific publications; conducted data collection and industry examination; built dynamic models and scenario simulations.
- 05/2016-01/2020 Social Innovation Teams (SIT)** (Milan, Italy)  
**Project Lead**
- Developed research design; supervised interns and team members; organized workload, deadlines, and activities; coordinated consulting activities for start-ups in the waste sector.
- 06/2019-08/2019 U.S. Department of the Interior, U.S. Geological Survey (USGS) Great Lakes Science Center**  
(Ann Arbor, Michigan)  
**Biological Technician**
- Designed research framework and experiments; organized lab equipment; processed data using microscope and image analysis software; built dynamic models.

- 06/2018-07/2018**      **University of Michigan, School for Environment and Sustainability (SEAS) (Zanzibar, Tanzania)**  
**Field Researcher**  
 • Developed research design; collected qualitative data through interviews, focus groups, and observations; collected quantitative data through trash transects and mapping tools.
- 04/2018-05/2018**      **University of Michigan, School for Environment and Sustainability (SEAS) (Ann Arbor, Michigan)**  
**Research Assistant**  
 • Contributed to scientific publications; developed best practices of climate change adaptation and absorptive resilience for stakeholders.
- 01/2017-05/2017**      **Politecnico di Milano, Polisocial (Milan, Italy)**  
**Research Assistant**  
 • Contributed to scientific publications; developed best practices of climate change adaptation for stakeholders.
- 03/2016-04/2016**      **Social Innovation Teams (SIT) (Nairobi, Kenya)**  
**Field Researcher**  
 • Developed research design; collected qualitative data through interviews, focus groups, and observations; developed workshops for stakeholders; implemented civic engagement on plastics waste management.
- 10/2013-03/2014**      **Politecnico di Milano, Department of Architecture, Built Environment and Construction Engineering (ABC) (Mantova, Italy)**  
**Research Assistant**  
 • Developed research framework; developed sustainability roadmap for stakeholders; assessed impacts of waste-based biofuel technologies.

#### FELLOWSHIPS AND AWARDS

- 2018**      **University of Michigan, College of Literature, Science, and the Arts International International Institute Student Fellow**
- 2018**      **Wallenberg Foundation (affiliation to University of Michigan)**  
**Wallenberg Summer Travel Award**
- 2017**      **Ermenegildo Zegna Founder's Scholarship (affiliation to Politecnico di Milano)**  
**Zegna Scholar**

#### VISITING PERIODS

- 2018**      **St. John's University of Tanzania, Faculty of Humanities and Education (Dodoma, Tanzania)**  
**Visiting Scholar**  
 • Outputs: improved skills in Swahili language, ethnographic studies, literature review for East/Coastal African literature, survey methods.

## SELECTED PUBLICATIONS

- 2020**        **Maione, C.**, Fernandez, G., Astic, S., Vito, D., Zakour, C., Oberhauser, T. and Srivastava, Y., 2020. *Position Paper on Marine Litter and Microplastics*. Major Group for Children and Youth of United Nations Environment Programme. UNEP MGCY.
- 2020**        **Maione, C.**, 2020. Adapting to Drought and Extreme Climate: Hunger Safety Net Programme, Kenya. *World Development Perspectives*, 20, p.100270.
- 2018**        **Maione, C.** and Aliakbarshirazi, N., 2018. Power Dynamics and Conflict of Interests in the Waste Sector: The Case of Nairobi, Kenya. *Detritus Journal*, 4(2018), pp.i-ii.
- 2018**        **Maione, C.**, 2018. New life to plastic: Reducing plastic waste generation in Kibera, Nairobi. *Journal of Pollution Effects & Control* 6(2018), pp.56.
- 2017**        **Maione, C.** and Morello, E., 2017. New Life to Plastic: Reducing the Consumption of Plastic Materials and Turning Waste into Opportunity in African Informal Settlements. *Journal of Business and Economics*, 11(8), pp.941-951.

## SELECTED CONFERENCE PRESENTATIONS AND PROCEEDINGS

- 2020**        Fernandez, G., Khalique, U., **Maione, C.** and Abbasrizvi, A. 2020. “Comparative analysis of energy management and consumption in light of sustainability agendas.” *14th Environmental Conference for Doctoral Students*, October 18-21, 2020, Tsinghua University, Beijing (China).
- 2019**        **Maione, C.** and Ceruti, N., 2019. “Using analytical data to support marine littering policy.” *Ecomondo 2019*, November 5-9, 2019, Italian Exhibition Group, Rimini (Italy).
- 2019**        **Maione, C.**, 2019. “Plastics at sea in ecotourism sites in Zanzibar, Tanzania.” *29th ISWA World Congress*, October 7-9, 2019, Euskalduna Conference Centre, Bilbao (Spain).
- 2019**        **Maione, C.**, 2019. “Emergence of plastic pollution on tourism beaches in Zanzibar, Tanzania.” *2019 SEAS Capstone Conference*, April 11-12, 2019, University of Michigan, Ann Arbor (Michigan).
- 2019**        **Maione, C.**, 2019. “Waste Economies in Zanzibar, Tanzania: The Emergence of Ocean Plastic Pollution as a Major Result of Ecotourism Growth.” *Michigan University-wide Sustainability and Environment (MUSE) Conference*, February 21-22, 2019, University of Michigan, Ann Arbor (Michigan).
- 2018**        **Maione, C.**, 2018. “Waste Economies in Zanzibar, Tanzania: The Emergence of Ocean Plastic Pollution as a Major Result of Ecotourism Growth.” *African Studies Center Fall Reception*, September 19, 2018, University of Michigan, Ann Arbor (Michigan).
- 2018**        **Maione, C.** and Aliakbarshirazi, N., 2018. “Power Dynamics and Conflict of Interests in the Waste Sector: The Case of Nairobi, Kenya.” *SUM 2018: 4th Symposium on Urban Mining and Circular Economy*, May 21-23, 2018, Monastero di Sant’Agostino, Bergamo (Italy).
- 2018**        **Maione, C.**, 2018. “New Life to Plastic: Waste Management in Kibera, Nairobi.” *African Studies Center: The First Decade and Beyond*, March 15-16, 2018. University of Michigan, Ann Arbor (Michigan).
- 2017**        **Maione, C.** and Morello, E., 2017. “New Life to Plastic: Reducing the Consumption of Plastic Materials and Turning Urban Waste into Opportunity in African Informal Settlements.” *5th International Conference on Sustainable Development*, September 18-20, Columbia University, New York (New York).