

**CAROLINA KELLY**  
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**SUMMARY:** Entry-level Civil/Environmental Engineer specializing in sustainable systems and infrastructure, with a Ph.D. in Civil Engineering and a Master's in Environmental Engineering. Excellent teamwork, decision-making and communications skills. Experienced in urban sustainability research, system modeling, process design/improvement and data collection/analyses. Proficient with AutoCAD Civil 3D and multiple industrial ecology programs. Able to learn and adjust to new programs quickly.

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**CERTIFICATIONS:** E.I. License No. 1100023160  
LEED Accreditation in Progress

**COMPUTER SKILLS:** MS Office, AutoCAD Civil 3D, Vensim PLE Plus, GaBi, SPSS Statistics, StatPlus, PVSyst, GREET

**ADDITIONAL SKILLS:** Project Planning, Process Modeling, Process Design & Improvement, Pollution Control (Air/Water/Hazardous), System Modeling & Analysis, Data Analysis

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#### **WORK EXPERIENCE**

Research Paper Editor, University of Central Florida – College of Engineering & Computer Science, 2014 – 2018

Corrected and prepared theses, dissertations and other scientific research documents for submission to peer-reviewed academic journals and publishers.

#### **RESEARCH EXPERIENCE**

Graduate Research Group Member, University of Central Florida – College of Engineering & Computer Science, 2014 – PRESENT

Currently writing and collaborating on scientific journal articles on urban sustainability.

#### **EDUCATION & HONORS**

Civil Engineering Ph.D., University of Central Florida, 2014 – 2018

- System Dynamics
- Operations Research
- Multi-Criteria Decision-Making
- Life Cycle Analyses

3.592 GPA Upon Graduation

Delta Epsilon Iota (since 2015)

## **EDUCATION & HONORS CONT.**

### Environmental Engineering M.S.Env.E., University of Central Florida, 2012 – 2013

- Industrial Ecology
- Industrial Waste Minimization/Treatment
- Atmospheric Dispersion Modeling
- Air/Water/Hazardous Pollution Control

3.300 GPA Upon Graduation

### Civil Engineering B.S., University of Central Florida, 2010 – 2011

- Engineering Design
  - Construction
  - Transportation
  - Geotechnical

### Environmental Engineering B.S., University of Central Florida, 2007 – 2010

- Air/Water Pollution Control
- Water Resource Management
- Process Design
- Solid/Hazardous Waste Management

### English A.A., Valencia College, 2004 – 2006

Phi Theta Kappa

National Dean's List 2005

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## **PUBLICATIONS**

- C. Kelly, N. C. Onat, O. Tatari, Water and Carbon Footprint Reduction Potential of Renewable Energy in the United States: A Policy Analysis Using System Dynamics, J Clean Prod. 228 (2019) 910-926. <https://doi.org/10.1016/j.jclepro.2019.04.268>
- C. Kelly, B. Sen, O. Tatari, A system dynamics analysis of the alternative roofing market and its potential impacts on urban environmental problems: A case study in Orlando, Florida, Resour Conserv Recy. 153 (2020) 104556. <https://doi.org/10.1016/j.resconrec.2019.104556>
- C. Kelly, B. Sen, O. Tatari, Impacts of Roofing Bylaws and Financial Incentives on the Alternative Roofing Market in Orlando, Florida: A System Dynamics-Based Case Study, Energy Build. under revi (2018).
- C. Kelly, A Holistic Analysis of the Long-Term Challenges & Potential Benefits of the Green Roof, Solar PV Roofing, and GRIPV Roofing Markets in Orlando, Florida, 2018. <https://stars.library.ucf.edu/cgi/viewcontent.cgi?article=7217&context=etd> (accessed May 28, 2019).
- S. Hiasa, C. Kelly, O. Tatari, Dynamic Techno-Ecological Modeling of Highway Systems: A Case Study of the Shin-Meishin Expressway in Japan, J Clean Prod. 115 (2016) 101-121. <https://doi.org/10.1016/j.jclepro.2015.12.025>