

# Jessica Hicks

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Personal Website: <http://jessicah3334.github.io/>

## EDUCATION

BACHELOR OF SCIENCE IN ENVIRONMENTAL ENGINEERING

May 2021

*University of Florida, Gainesville, FL*

GPA: 3.68/4.00

*Relevant coursework:* Potable Water System Design, Hydraulics, Fluid Dynamics, Hydrology, Professional Communications, Environmental Planning, Ecological Engineering

## PROJECTS

LAKE CAROLINE WATER TREATMENT PLANT

Fall 2020

*Potable Water System Design, UF*

- Worked as a team to design a full-scale water treatment plant to treat 11 million gallons per day
- Chief designer for plant filtration and CAD drawings
- Used EPA-Net software to design pipe networks and calculate head loss
- See <http://jessicah3334.github.io/portfolio> for full portfolio

## EXPERIENCE

UNDERGRADUATE RESEARCH ASSISTANT

May 2020 - present

*Todd-Brown Lab, Environmental Engineering Department, UF*

- Co-authored a paper on the Cohort Marsh Equilibrium Model (CMEM) to synthesize model evolution and present new developments
- Created a GUI (Graphic User Interface) to improve the accessibility of CMEM, resulting in an open-source platform for researchers to predict the response of coastal marshes to climate change
- Conducted independent projects using R (Computing language) to improve existing carbon models

## INTERN

August 2019-January 2020

*UF Office of Sustainability*

- Encouraged sustainability at the university through the Office of Sustainability's "sustainable transportation initiative"
- Utilized GIS software to improve cycling infrastructure on campus
- Repaired bicycles for UF students and faculty through the Gator Gears bicycle program

## TRANSCONTINENTAL CYCLIST

Summer 2019

*Green Riders: Good Deeds on Bikes*

- Cycled 4700+ km across Europe with a grassroots environmental activism group focused on promoting environmental action and sustainability
- Planted dozens of community fruit trees, participated in cleanups, and supported various community and environmental organizations

## TECHNICAL SKILLS AND CERTIFICATIONS

- ESRI GIS software including ArcMap
- HEC-HMS (hydrologic modeling software)
- Autodesk software including AutoCAD
- R (Programming), *proficient*
- EPA-Net
- Python (Programming), *proficient*
- Web development (HTML, CSS)
- WFR (Wilderness First Responder) and CPR

**Personal Interests:** outdoors, cycle touring and mountain biking, climbing, reading, minimalism, coding