Jessica Hicks

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EDUCATION

BACHELOR OF SCIENCE IN ENVIRONMENTAL ENGINEERING   May 2021
University of Florida, Gainesville, FL   **GPA: 3.68/4.00**
Relevant coursework: Programming for Env. Eng., Geographic Information Sciences (GIS), Professional Communication, Engineering Statistics, Water Chemistry, Environmental Planning

EXPERIENCE

UNDERGRADUATE RESEARCH ASSISTANT   **May 2020 - present**
Todd-Brown Lab, Environmental Engineering Department, UF

- Conducted independent and collaborative projects using R (Computing language) to improve the Marsh Equilibrium (MEM) and Grow-Burn-Decay carbon models
- Constructed a GUI (Graphic User Interface) using RShiny to improve the accessibility of MEM, resulting in an open-source platform for researchers to predict the response of coastal marshes to climate change
- Experience with programming tools such as Markdown, Git, and R tidyverse
- Co-authored a paper on the Cohort Marsh Equilibrium Model (CMEM) to synthesize model evolution and present new developments

INTERN   **August 2019-January 2020**
UF Office of Sustainability
- Utilized GIS software to improve cycling infrastructure on campus
- Encouraged sustainability at the university through the Office of Sustainability's "sustainable transportation initiative"
- Instructed students on sustainability, cycling safety, and repairs through hands on workshops

PROJECTS

PERSONAL WEBSITE   **Spring 2021**
- See http://jessicah3334.github.io/
- Created web application using Flask in python to showcase personal projects
- Worked with HTML, CSS, python, and Git to create style and functionality

WIKIPEDIA ARTICLE SUGGESTOR   **Spring 2021**
- Created an engine which follows links in Wikipedia articles recursively to give suggestions for related articles (using the python packages requests and BeautifulSoup)

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

TECHNICAL SKILLS AND CERTIFICATIONS

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

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