L.MANUEL CIRRICULUM VITAE

Laura A. Manuel

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EDUCATION

B.S. Civil Engineering, University of Louisiana at Lafayette, Louisiana (2020)

Current: PhD, River and Coastal Science and Engineering, Tulane University, Louisiana (2024)

Tentative Thesis Title:

Development of a Sediment and Water Quality Forecasting system for the Northern Gulf of Mexico

Relevant Coursework:

Hydraulic/Hydrologic Modeling, Introduction to River Science and Engineering, River Mechanics and Management, Rivers and Estuaries, Methods in River Sampling, Advancements in Drone based Remote Sensing, Emerging Data Science and Research Software

RESEARCH AND WORK EXPERIENCE

Civil engineering internships: Louisiana Department of Transportation and Development (2018) and CLECO Corporation (2019) Research Apprentice at University of Louisiana at Lafayette (2016-2020): ECC Concrete design, UAV use in Hydrographic modeling Lifeguard (2020)

ACADEMIC PROJECTS

Hydraulic online course author and co-author: <u>https://www.hydrolearn.org</u> UL ASCE Student chapter Concrete Canoe: Team captain (2019) Senior Capstone Design Project Manager: Lafayette Expressway (2020)

PRESENTATIONS

1st Place Mead Ethics Paper/Presentation 2019 Deep South Green House Gas Emissions and Land Loss Scenarios for the Northern Gulf of Mexico Hydrologic, Sediment, and Water Quality trends of the Mississippi River at St. Francisville, La

LEADERSHIP

UL Engineering Ambassadors President (2017-19) UL LES: Public Relations Chairman (2019-2020) UL Student Government Engineering Senator (2018-19) UL College of Engineering Dean's Council Member (2019-20)

HONORS AND AWARDS

UL Civil Engineering Outstanding Junior (2019) UL Civil Engineering Outstanding Graduate (2020)

MEMBERSHIPS

ASCE, LES, LAGCOE



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SERVICE

Greater New Orleans Science and Engineering Fair Judge Tim Tebow Foundation Night to Shine Volunteer Rockefeller Wildlife Refuge coastal clean up 4H Camp Grant Walker Summer Staff member

SKILLS

Software: HEC-RAS, Delft -3D Classic, Delft-3D FM, Arc-GIS, RStudio, AutoCAD, Civil3D, Microsoft: Excel, Word, PowerPoint **Engineering:** FE exam: Passed; Engineering Intern License: LAPELS EI.0034565- Active 07/2020 **Interest:** Sewing, painting, reading, hiking, hunting

RESEARCH INTERESTS

My research activities focus on hydraulic modeling with sediment and nutrient transport in riverine, estuarine, and coastal systems for the purposes of developing operational forecasting models.