Wenxi Huang

Email: wenxi.huang@ufl.edu

Education:

Florida International University **Miami, FL**
Master of Science in Information Systems Dec. 2020

Florida International University **Miami, FL**
Master of Science in Chemistry Aug. 2016

South China University of Technology **Guangzhou, China**
Bachelor of Science in Chemistry May 2013

Work and Research Experience:

Assurant **Florida, USA**
Data Engineering Intern Jun. 2020 – Dec. 2020

- Data analysis on Microsoft SQL databases within Data-Warehouse environment
- Customize query for connecting data warehouse and Power BI
- Create customized reports to provide status and insights to business users using Power BI and Azure DevOps
- Working with business users on requirements gathering and prioritization
- Working with the development team on the direction of development tasks
- Schedule and host meetings with business users and development
- Prepare Business Case and Project Charter for managers
- Create documents for business processes that deployed from the testing environment into the production environment

Nutrient Analysis Core Facility, FIU **Florida, USA**
Senior Analyst Aug. 2017 – Jul. 2021

- Conduct customized analysis reports to clients using Tableau Python and R.
- Specialized in statistical analysis, visualization tools, and delivering reports to clients and the public.
- Responsible for data verification and method validation studies, issuance of new methods, assist with the internal and external laboratory audits, field audits.
- Extensive hands-on experience with the instrumentation and techniques for nitrogen, phosphorus, and silica analysis for seawater/freshwater samples and soil/sediment samples.
- Process over 200 samples per month for clients, including FIU faculty and federal and government agencies, such as Monroe and Broward County, SFWMD, FDEPA, USEPA, etc.
- Perform QA/QC plan and SOPs according to EPA methods and standard methods. Strictly follow NELAC requirements for the analytical procedure, record keeping, and documentation.
- Maintain the laboratories in compliance with state regulating agencies, including the Department of Health.

Florida International University **Florida, USA**
Research Assistant Jun. 2015 – Aug. 2016 & Sep. 2013 - May 2014

- Performed sampling along Shark River Slough, Taylor Slough, and Florida Bay
- Re-evaluated the contribution of such polyphenols to ‘protein-like’ fluorescence in natural organic matter.
- Developed a quantitative GC/MS analytical method using gallic acid and tannic acid standards and applied to environmental samples.
- Conducted optical properties measures of dissolved organic matters.
- Independently drove the analysis and reporting of the EEMs (Emission Excitation Matrix) fluorescence and DOC (Dissolved Organic Carbon) concentration for the FCE-LTER (Florida Coastal Everglades Long Term Ecological Research) samples.
- Filtered, extracted, and analyzed POC(Particulate Organic Carbon) samples for photodecomposition.
- Maintained records for laboratory inventory and EH&S operations.

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Florida International University **Florida, USA**

Teaching Assistant May 2014 - May 2015

- Laboratory instructor for General Chemistry.
- Evaluated student performance, including grading exams, quizzes, assignments, and reports.
- Maintained weekly office hours to communicate in person with students as needed.
- Responded to student's inquiries regarding grades, assignments, attendance, and course material.
- Addressed the needs of a diverse student population to maximize student success.
- Ensured student safety and the use of adequate laboratory procedures.

BGI (Beijing Genomics Institute) **Shenzhen, China**

Research Assistant Jun. 2012 - May 2013

- Conducted genome assembly and function annotation for leopard gecko using bioinformatic approaches.
- Performed genome assembling using a de Bruijn graph approach and evaluated the quality of genome assembly by assessing sequencing depth and genome coverage.
- Evaluated the quality of genome assembly by assessing sequencing depth and genome coverage.
- Identified genome-wide repeats using a public repeat library.

Publication and Conference:

- W. Huang, O. Salamanca, Application of Artificial Intelligence (AI) and Computational Technologies to Assist the International Union for Conservation of Nature (IUCN) in its Efforts to Monitor and Preserve the Environment for the Welfare of Humanity and All Other Species, 2020 AIS Student Chapter Leadership Conference, March 26-28, Normal, Illinois
- Mckay, G., W. Huang, C. Romera-Castillo, J. E. Crouch, F. L. Rosario-Ortiz, and R. Jaffé. "Predicting Reactive Intermediate Quantum Yields from Dissolved Organic Matter Photolysis Using Optical Properties and Antioxidant Capacity." Environmental science & technology (2017).
- Huang, Wenxi. "Characterizing the Molecular Structure and Reactivity of Natural Organic Matter in The Everglades." (2016).
- W. Huang, G. J. Mckay, C. Romera-Castillo, F. L. Rosario-Ortiz and R. Jaffe， Assessing dissolved organic matter photoreactivity in a subtropical wetland ecosystem: Interrelations between optical properties, redox potential and the formation of reactive species, 92nd Florida Annual Meeting and Exposition (2016 FAME), May 5-7, Tampa, Florida.
- Ya, C., W. Huang, and R. Jaffe, Organic Matter Dynamics in a Mangrove Dominated Estuary: Linking Particulate Organic Matter with Dissolved Organic Matter, 2014 FCE LTER All Scientists Meeting, March 10-11, Miami, Florida
- Wang, Weixing, Jarett C. Martin, Rongcai Huang, Wenxi Huang, Anhua Liu, Aijie Han, and Luyi Sun. "Synthesis of silicon complexes from rice husk derived silica nanoparticles." RSC Advances 2, no. 24 (2012).

Awards and Honors:

- 1st Place Winner of Computational Society Case Study Challenge 2020
- FIU Advanced Leadership Challenge Medallion 2016
- Xuwen Honor Student 2013
- Feiyang Scholarship 2013
- SCUT Scholarship 2012