

JASON B.X. HUA

EDUCATION

PhD in Civil and Environmental Engineering

University of Iowa, Iowa City, IA

August 2021 - Present

BSE in Civil Engineering

University of Iowa, Iowa City, IA
Honors in Civil Engineering

August 2017 - May 2021

SKILLS

Software & Tools: Microsoft Office, QGIS, PgAdmin, MassHunter Qualitative Analysis, R Studio, Visual Studio
Programming: R, SQL, MATLAB, HTML, CSS

RESEARCH EXPERIENCE

Graduate Research Assistant

August 2021 - Present

Iowa Superfund Research Program - Analytical Core, Project 4

- Led the largest study of airborne PCBs and PCB emissions from materials in schools to date with a team of professors, research scientists, and undergraduates, in collaboration with the Vermont Department of Environmental Conservation (DEC).
- Collected and extracted samples using passive air sampling, passive emission sampling, accelerated solvent extraction, and gas chromatography in tandem with mass spectrometry (GC-MS/MS).
- Compiled, maintained, and analyzed large datasets of PCBs and school data using R, SQL, and PgAdmin.
- Developed extraction and analytical method for non-target analysis of pollutants emitted from building materials in schools using gas chromatography-quadrupole time-of-flight mass spectrometry (GC-QTOF).
- Major outcomes of this study include identifying key PCB sources in Vermont schools, enabling state officials and school staff to target specific materials for removal, leading to more effective remediation efforts.

PROFESSIONAL EXPERIENCE

Civil Engineering Intern

May 2018 - August 2018

City of Urbandale

- Assisted city engineers and technicians with tasks such as inspection of construction projects, traffic counts, infrastructure inspection, GIS processing, and surveying.
- Utilized software such as Collector, ArcGIS, and Cartegraph for inspections, managing city utilities, and creating maps.
- Compiled FEMA Preliminary Damage Assessment Report after flash flooding damaged infrastructure.

CERTIFICATIONS

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| 1. LEED Green Associate | Passed March 2025 |
| 2. FEMA Emergency Management Institute IS-00700.b | Passed May 2021 |
| 3. FEMA Emergency Management Institute IS-00100.c | Passed March 2021 |
| 4. Fundamentals of Engineering (FE) Exam | Passed January 2021 |