Michael Desch, EIT

3201 S. Dearborn St, Office 220B, Chicago, IL 60616

mdesch@hawk.iit.edu

260-418-2652

Education:

Illinois Institute of Technology, Chicago, IL — Aug 2014 – Present

- PhD in Civil Engineering with a specialty in Structural Engineering — Jan 2019 – Present
- Master of Engineering in Structural Engineering (GPA 3.87) — Jan 2017 - Dec 2018
- Bachelor of Science in Architectural Engineering (GPA 3.87) — Aug 2014 - Dec 2018

Work Experience:

Lab Instructor, Illinois Institute of Technology – Chicago, IL — June 2019 – Present

- Teaching Finite Element Analysis Methods using SAP2000

Teaching Assistant, Illinois Institute of Technology – Chicago, IL — Aug 2017 – Present

- Assisted course instructors with grading, student reviews, and presentations.
- Structural Analysis I&II, Advanced Analysis, Dynamic Analysis, Non-Linear Analysis

Facilities Management Apprentice, Federal Reserve Bank - Chicago, IL — Nov 2015 – Dec 2018

- Researched and piloted adoption of Revit life cycle models for new projects
- Maintained and updated CAD library and facility plans using AutoCAD
- Worked closely with building electricians to document and update electrical systems
- Assisted Project Management Team with projects, plans, and schedules
- Managed projects creating custom signage, specialty plans, and new dept. procedures.

Student Technical Assistant, General Dynamics Electric Boat – Groton, CT — June 2017 – Aug 2017

- Performed stress analysis and design on submarine piping and hanger support systems
- Coordinated pipe and hanger locations with adjacent systems

Academic Experience:

- Static and dynamic structural analysis (using both linear and non-linear approaches)
- Structural design using steel, concrete, and timber
- Design considering seismic forces
- Building façade rehabilitation & design
- Research projects on analysis methods for fatigue, international seismic design codes, and STEM education

Recent Projects:

- Architectural Engineering Laboratory, Design and Planning — Aug 2017 – Present
  -In conjunction with Professors, CAE Dept. & IIT Facilities Dept.
- ASCE Student Steel Bridge Competition — Aug 2015 – May 2018
  -Captain in charge of Design, Planning, and Fabrication
  -Awarded 1st place nationally in lightness 2018
  -Awarded 3rd place nationally in construction speed 2016

Software Skills:

- Modeling and Analysis (CSI SAP2000, Autodesk AutoCAD, Autodesk Revit, Autodesk Robot, Open Studio), Programming (C, Python, Java, MATLAB, VBA), Web Development (HTML, CSS, PHP, JS), MS Office

Society Memberships:

- Member of Chi Epsilon, IIT chapter — Jan 2019 – Present
  -Chapter President — May 2019 – Present
- Member of ASCE, IIT student chapter — Aug 2014 – Present
  -Executive Board & Events Coordinator 2017 — Nov 2016 – Nov 2017
  -Steel Bridge Captain 2017, 2018 — May 2016 – May 2018
- Member of SEAOI, IIT student chapter — Aug 2017 – Present