

# YE (JEN) LIU

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## EDUCATION

**DUKE UNIVERSITY, The Fuqua School of Business**

Durham, NC

**Master of Business Administration**

May 2023

770 GMAT; Forté Fellow; Member of Technology, Entrepreneurship, and BOLD club; Section Cabinet in Service & Sustainability

**UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN, The Grainger College of Engineering**

Champaign, IL

**Master of Science in Civil Engineering**

Dec. 2016

Concentrations in Structural Engineering and Construction Management

**Bachelor of Science in Civil Engineering (Graduated with High Honor)**

May 2015

Concentrations in Structural Engineering and Construction Management

Dean's List (8 semesters); James Scholar; Tau Beta Pi Honor Society; Design Captain of Earthquake Engineering Research

## EXPERIENCE

**UNIVERSITY OF SOUTH CAROLINA, College of Engineering and Computing**

Columbia, SC

**Research Engineer**

2020-Present

- Collaborated with cross-functional research team of 4; reviewed 40+ research papers and provided Engineering and Scientific insights and solutions for intelligent Prediction Systems. (Python, Scikit-learn)
- Spearheaded development of a stochastic optimization programming model; analyzed resource requirements of carsharing demand system for underserved population; presented key findings and proposed plan leading to 95% fulfillment rate. (Python)

**WALTER P MOORE**

Washington, DC

**Graduate Engineering Consultant - Structural Engineering Group**

2019-2020

- Identified innovation opportunities in engineering design process and steered a team of 5 engineers to develop automation tools for \$10B JFK International Airport Terminal 1 Redevelopment Project, eliminating repetitive tasks by 80%. (Python)
- Supervised technical drafters; defined vision and roadmap from conception through launch for various digital tools to expedite 3D modeling process for multiple design projects, increasing productivity for cross-functional team by 40%. (Dynamo/Python)
- Proposed and launched digital visualization tools to collect and filter cross-office and cross-functional data to enable faster task delegation; Trained 10+ senior project managers in utilizing tools, increasing project management efficiency by 50%. (PowerBi)
- Employed Finite Element Analysis, checking feasibility in structural, thermal, and vibration domains utilizing structural design analysis programs, reducing error function by 80% for a 435,488-square-foot sports and entertainment complex.

**AECOM**

Hunt Valley, MD

**Structural Engineer in Training – Building Structures**

2017-2019

- Designed substructure for \$75M DCA National Airport Terminal Redevelopment Program; identified and resolved key design challenges and delivered design documents on time under time pressure.
- Owned 30% structural design for a new five-story, 900,000-square-foot head house for \$35M PHL International airport renovation project.
- Owned and delivered 100% structural design documents of \$7.2M Camden Station Replacement Project (a “green” facility).
- Led a team of 3 engineers to conduct multiple building inspections and produced field reports identifying critical risks and resolving severe structural issues.

## SIDE PROJECTS

**Relax Lotus (Web app):** *Health and Wellness app to help family and friends relax through music.* (relaxlotus.com)

- Created initial mock-ups and motivated developer partner to prototype web app in 2 weeks. (Adobe XD)

**What 2 Watch (Mobile app prototype Course Project):** *A mobile app that combines social media with streaming platforms*

- Managed ideation, conducted 12+ user interviews, and created roadmaps and mock-ups. (Adobe XD)

## ADDITIONAL INFORMATION

**Volunteering:** Evangelist of Women Who Code Cloud, a non-profit organization that empowers women in technology careers

**Programming Languages:** Python, SQL, MATLAB, PowerBi, JavaScript, HTML

**Certificates:** Deep Learning Specialization ([Credentials](#)) , Algorithm Specialization ([Credentials](#))