



Education

Masters of Science (MSc): Civil Engineering (Focus on Structural Engineering)
Stony Brook University - Stony Brook, NY

Aug. 2021 - Dec. 2022

Bachelor of Engineering (B.Eng.): Civil Engineering
Stony Brook University - Stony Brook, NY

Aug. 2017 - May 2021

Work Experience

Design Lead

July 2017 - Present

Excel Visual Solutions - Woodside, NY

- Managed all phases of 14 new product developments, including concept design, milestone management and incorporating customer feedback.
- Prepared and reviewed design specifications, scopes of work, schedules of payments and other documents.
- Worked with clients to gather and define requirements, establish scopes and managing project milestones.

Design Engineer

May 2021 - Aug. 2021

Key Civil Engineering P.C. - Holtsville, NY

- Assisted on projects from conception/feasibility through final plan preparations
- Prepared contract/design drawings with project specifications for commercial and residential projects
- Conducted site visits to oversee construction activities, standards and regulations.
- Developed grading and drainage, sanitary, conceptual site layouts, zoning ordinance review and lighting design plans for varying land development projects

Technical Skills

- **Programming:** Python, Matlab, HTML, CSS, Javascript
- **Software Experience:** Abaqus, Ansys, AutoCAD, Adobe Creative Suite, CorelDraw, Microsoft Office Suite, Revit

Recent Projects

Mechanics of Non-Uniform Grid Shell Structures (M.Sc Research and Paper)

Aug. 2022 - Dec. 2022

- Stony Brook University

- Perform a comprehensive study on the mechanics of non-uniform grid shell structures by developing experimental models and validating the results with numerical models developed in Abaqus. Utilize Linear Buckling Analysis and Post-Buckling Analysis to determine the stability of the grid shells during the application of loads on its extremities.

Correlation of Bridge Conditions with Physical & Environmental Factors - Stony Brook University **Dec. 2021**

- Developed models that determine which physical and/or environmental extremity has the greatest impact on overall bridge deterioration in the United States from 1992 - 2020, utilizing algorithms to train and validate datasets and explain the relationship between bridge parameters and component condition ratings.

Design of Outdoor Construction Storage Facility - Key Civil Engineering P.C.

July 2021 - Aug. 2021

- Review the Town of Babylon zoning ordinances laws for a renovated outdoor construction Storage Facility. Created site, grading and drainage plans in accordance with zoning laws and client demands and developed landscape plans with coordination from landscape architects.

Truss Design Feasibility Analysis - Stony Brook University

Nov. 2021 - Dec. 2021

- Developed a numerical Finite Element model in Matlab to analyze truss structures to gauge the behavior of 2- and 3D truss and solid structures when subjected to various loading conditions. Analyzed and interpreted the accuracy of the calculated response and the adequacy of the developed model in real world applications.

Rebrand for Tex's Chicken & Burgers - Excel Visual Solutions

Aug 2021 - Aug. 2022

- Developed and designed new marketing materials for a corporate rebrand of Texas Fried Chicken to Tex's Chicken & Burgers for its 40+ locations in the tri-state area. Developed a new branding strategy to reflect the company's new vision, mission and core values.