
CIVIL-STRUCTURAL ENGINEER/ PROJECT ENGINEER**SUMMARY**

Solutions-driven Civil/Structural Engineer with +10 experience in all aspects of civil & construction projects including analysis, design, construction, estimation, procurement, execution and management. Solid knowledge in optimizing structural design utilizing CAD program with proficiently in using structural analysis software (FEA). Proven success in light and heavy concrete/steel structures, large span framing and industrial construction. Accountable for providing budgetary costs during project planning, managing projects and personnel, as well as, supervision of contractors for domestic and international projects.

SKILL HIGHLIGHTS

- Structural Modeling/FEA
- Design Steel/Concrete
- Design Transportation Facilities
- Fabrication/ Inspection
- Project Management
- Field Engineering
- Teamwork & Leadership
- Budgeting & Scheduling
- Structural Dynamics
- Road Geometric Design
- Heavy Lifting Analysis
- Estimating
- Design Optimization
- Quality Assurance
- Material take-off
- Road/ Port Structure

CERTIFICATIONS & COMPUTER SKILLS

- Professional Engineer (PE) - Texas Board
- Project Management
- MS-Project/ Visio
- Mathcad/ Excel
- Certified Associate in Project Management (CAPM)
- RAM Steel/Concrete
- SACS/ MOSES /Orcaflex
- STAAD.Pro/ Safe/SAP/ETABS
- AutoCAD/ REVIT /CIVIL 3D/ SOLIDWORKS
- MS-Project, Primavera
- MicroStation/ Geopak
- MS-Office 365

Faculty; Design & Drafting Engineering Technology**Houston Community College, Houston, Texas****2017-Current**

- Instructor for civil, structural and survey design; AutoCAD, Civil 3D, MicroStation V8i for 2-D and 3-D designs.
- Manufacturing program coordinator; collaboration with departments computer science, manufacturing and design.
- Advising students on classes and career options in Drafting and Design. Experience with modeling equipment with 3-D prints in various files assemblies using CAD programs. Introducing manufacturing and production control using CNC machines with respect to industrial codes. Facilitate instruction for Drafting and Design Engineering classes.

Structural Design Engineer**Global Perspective International****2018-Current**

- Conducted structural calculation review and analysis for 5-story steel structure (Ghubra 4-star hotel), Masqat, Oman.
- Reviewed geotechnical report and generated foundation design, slope stabilization and retaining wall design in residential area.

Sr. Structural Engineer /Project Engineer**TECHNIP USA, Houston, Texas****2011 to 2016**

- **MWCC:** Prepared engineering Basis of Design including design criteria, environmental, loading cases, material properties, design methodology and standards for structural analysis, for Installation free standing riser system (FSR). Performed structural analysis for offshore heavy liftings, design of heavy weight equipment, lashing and sea-fastenings.
- **Petrobras Cascade:** Generated and optimized structural 3D model and analyzed the results of analysis. Performed dynamic analysis for subsea structure installation and pipelay project, considered several weather criteria/ load cases and demonstrated results. Conducted Structural Members Design for steel supports; beams, columns, connections, braces by generating spreadsheets in Excel VB(A) and Mathcad.
- **Total Kaombo:** Provided support to Technip France and Technip UK in equipment design, finite element analysis, technical deviation and product development. Used FEA by ABAQUS to design transitions to minimize offshore trips. Reviewed and approved installation aids detailed design and drafting. Provided a mitigation plan for utilizing installation aids with design nonconformance that saved ~ \$0.5MM.
- Liaised with the design and drafting department to prepare drawings and checked for compliance with design.
- Created uniform standard for the corporate; designed and analyzed several anchor pile sizing and prepared installation manuals.
- Attended in periodic project meetings, HIRA, constructability reviews, and prepared lesson learned.
- Led Project Management (PM) by developing of Project Execution Plan (PEP), progress report, and invoices. Prepared CTR.
- Developed inspection test plan for construction activities to assure integrity of the project and erection as well as supervising test plans to assure proper implementation. Effectively corresponded with client and contractors.

Civil Project Engineer**SPEC LLC, Tehran, Iran****2005 to 2011**

- **Mobin Petrochemical Sea Water Intake and Cooling Water Distribution Project:** Project Engineer directed project teams by providing communication, coordination and follow-up to meet project goals and objectives; in construction of water intake, & distribution of cooling water project. Assisted in setting project tasks (WBS) and preparing time schedule (CPM), budgeting and cost control, assigning resources and follow up the progress. Led project engineering group to ensure successful project execution. Assisted project manager in resolving conflicts.
- Evaluated contractors, vendors and suppliers.
- Provided input to project schedule to assure engineering, procurement and construction activities lined up with proper buffer minimizing overall schedule while maintain it practical. Assisted in allocating resources and leveling.
- Monitored construction activities to pursue execution schedule and provide input to catch up plan in case of delay.
- Developed structure and equipment installation procedure for heavy structures such as heavy concrete culverts and platforms.
- Conducted contractual discussion with contractors avoiding claims while milestone incentives paid as per contract basis.
- Verified and approved technical site queries as Technical authority, resolving issues assuring HSSE risk are mitigated to ALARP.
- **Lead engineer;** responsible for checking calculations for modular structures and its foundations, equipment foundation. Coordinating with other disciplines, tracking the progress and preparing MTO's and leading drafters.
- Developed and reviewed punch list assuring flawless handover of structural and mechanical completion to commissioning and start up team. Answered RFI's from site and fabrication shops.
- Supervised and managed earth work, Cut-Fill calculations/ operation, Site Plan Layout setting out, calculated machinery, tools and material required.
- Conducted frequent field visit for concrete structure construction. Oversight mobilization, earth work, building progress, performed testing and load outs for subsea concrete supports. Prepared work plan for site personnel and heavy-duty equipment (cranes, trucks, Pumping equipment, transportation). Completed the progress ahead of schedule and saved ~ \$0.5MM.
- **Design Engineer;** generated detail basis design including design criteria, environmental, loading cases (gravity and lateral), material properties, design methodology and standards for global analysis of steel and reinforced concrete structures.
- Generated structural analysis for prefabricated heavy concrete modules. Calculated and designed lifting equipment and skidway steel supports for 1500te concrete modules. Led drafting team in design structures and formworks, performed QA.
- Saved significantly on project costs and timing by revising the design of roadway crossing structure and earth works by performing design optimization.

Civil-Structural Design Engineer**SADAF Co., Tehran, Iran****2002 to 2005**

- **Bushehr-Assaluoye 10km divided highway (Design-build project).** Civil transportation design engineer; performed geometric design utilizing national road design codes. Performed highway capacity analysis. Calculated max traffic volume and flow rates based on local information.
- Performed horizontal and vertical curve design considering exit and entrance with multiple crossings.
- Completed analysis and detail design for transportation facilities structures. Performed structural designed for two steel plate girder bridges considering several load cases and high traffic road.
- Performed dynamic and fatigue analysis for steel bridge for its life cycle.
- Geotechnical and foundation design for bridge foundations.
- Performed structural analysis and design for pre-fabricated concrete culverts and installations.
- Performed construction estimates for large earth work calculations of cut & fill and calculated required machinery, performed grading design, storm water and hydraulic calculations and storm water drainage system design along the road.

Relevant Experience

- Conducted research for port structure behavior under cyclic loading and fatigue criteria.

Education & License**Master of Science (MSc), Marine Structures Engineering,** University of Hormozgan, Iran (Year 2004).**Bachelor of Science (BSc), Civil Engineering,** Tehran Azad University, Iran (Year 1999).**Certified Associate in Project Management,** Houston Community College, Houston, TX (Year 2018)**Professional Engineering (PE) through NCEES,** Texas Board of Professional Engineers (Current 2018)**Codes**

AISC (LRFD & ASD), AASHTO, ASCE7, AWS, UBC, IBC, ACI, OSHA, LEED, API, ASTM, DNV, ASME, ADA, NFPA...