

PROFESSIONAL SUMMARY

- Bachelor of Science in Mechanical Engineering, Texas A&M University, 2013.
- Primary areas of consultation include mechanical systems, HVAC, plumbing, and utility systems. Residential and commercial construction, plumbing, foundation, and roof inspections; water intrusion/damage and foundation failure/deflection analysis.
- Experiences include detailed on-site analyses, repair scope, specification development, acceptance testing, validation, and equipment re-commissioning.

EMPLOYMENT RECORD

- 2023-Present **MCDOWELL OWENS ENGINEERING, INC**
Houston, Texas Consulting Engineer. Areas of primary interest include mechanical system and equipment failure analysis, commercial and residential construction, mechanical, electrical, plumbing (MEP) related losses and evaluation and analysis of workplace accidents. Premises liability related to slip/trip and fall accidents.
- 2018-2023 **EFI GLOBAL**
Houston, Texas Senior Forensic Engineer. Primary interests included cases involving fatality and personal injury claims involving industrial equipment. Analysis of HVAC, plumbing systems, and components for commercial and residential structures; premises liability related to slip and fall accidents; mechanical failures of residential and commercial equipment to include plumbing leaks, appliance failures, HVAC failures; oil and gas equipment failure; material fracture (fractography) and corrosion failure analysis; commercial equipment asset valuation.
- 2013-2018 **TECHNIPFMC**
Houston, Texas Production Engineer III. Responsible for concept design, final design, and fabrication reviews of new product tooling for offshore oil and gas and underwater piping involving analysis of weld failure, fastener shear, fastener tear-out, tension, compression, buckling, and bending; supervised risk and safety mitigation for annual high-risk projects and conducted root cause analysis investigations focusing on material properties and factor of safety calculations; issued protocols and conducted factory assembly and testing on equipment before offshore development. Assisted with drilling and fracking assembly operations.

- 2012-2013 **MECH. ENG. DEPT. TEXAS A&M UNIVERSITY**
College Station, Texas Teaching Assistant. Led seminars regarding effective communication and development of leadership skills. Led weekly engineering practice presentation and evaluated student competency in professional presentations and technical report writing.
- Summer-2012 **CATERPILLAR**
Houston, Texas Technical Marketing Intern. Programmed software for record entry and retention catered for ease of use. Created enhanced marketing presentations for natural gas service equipment catalog.
- Summer-2011 **JP KENNY**
Houston, Texas Engineering Consulting Intern. Analyzed drafting documents for inconsistencies and recommended revisions to the document control department. Produced CAD drawings and 3D models pertaining to subsea processing equipment catalog.

EDUCATION

- Bachelor of Science, Mechanical Engineering
| Texas A&M University, College Station, Texas, 2013

REGISTRATIONS, LICENSES & CERTIFICATIONS

- Licensed Professional Engineer:

● Alabama	No. 39734	● New Mexico	No. 28692
● Arkansas	No. 19891	● Oklahoma	No. 32074
● Arizona	No. 78442	● Texas	No. 131172
● Colorado	No. 0062323	● Tennessee	NO. 129776
● Florida	No. 90075	● Kentucky	No. 39518
● Louisiana	No. 43213	● Georgia	No. 051600
● Mississippi	No. 31217		

REGISTRATIONS, LICENSES & CERTIFICATIONS

- Certified Fire and Explosion Investigator (C.F.E.I.)
National Association of Fire Investigators
2023 by examination
Registration Number 26662-16195
- CXLТ, Tribometer Slip Resistance Testing Certified
- EPA Section 608, Safe Handling of Refrigerants
Applicable Refrigerant Types: Universal

CONTINUING EDUCATION (SELECTED)

- National Association of Fire Investigators (NAFI), Fire Investigation Training Program, 2023
- Vale Advanced Roofing Certification, Vale Training, 2022
- Electrical Engineering Concepts for the Non-Electrical Engineer, Ryan Malone, 2021
- Corrosion Control and Tactics, Gerald Davis, 2021
- Principles of Water Treatment, Ryan Malone, 2021
- Practical Fractography, ASM International/ John Christie, 2020
- CXLТ Slip Resistance Testing Certification, Excel Tribometers, 2019, 2022
- Air Conditioning and Refrigeration, TPC Training/ Ken Green, 2019
- International Association of Arson Investigators (IAAI) – CFITTrainer.net
 - Investigating Motor Vehicle Fires, 2018
 - Motor Vehicles: The Engine and the Ignition, Electrical and Fuel Systems, 2018
 - Motor Vehicles: Transmission, Exhaust, Brake, and Accessory Systems, 2018

PROFESSIONAL MEMBERSHIPS

- American Society for Mechanical Engineers
- Texas Board of Professional Engineers
- SAE International
- International Association of Arson Investigators
- National Association of Fire Investigators
- National Fire Protection Association
(Company Affiliation)