

Shahroz Waheed Shaikh  
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## Skill Summary

- **Project Management:** Project Planning, Scheduling, Budgeting, Resource Allocation, Team Leadership, Risk Management, Stakeholder Communication, Client Relations, Lean Principles, KPI Monitoring, Work Breakdown Structures (WBS)
- **Technical & Design:** CAD (SOLIDWORKS, AUTODESK, REVIT), Simulation (ANSYS, ABAQUS, MATLAB), Structural Analysis, Rail Track Design, Prototyping (3D Printing, Laser & Screen Printing)
- **Software & Systems:** MS Project, Trello, E-cube, Team Binder, Smartsheet, SAP (Purchase Orders, Goods Receipts), Primavera P6 (Basic Scheduling), Power BI (Data Visualization & Reporting), VBA (Excel & Automation)
- **Management & Operations:** Operations Management, Supply Chain & Procurement, Six Sigma, Kaizen, Intern Training, Subcontractor Coordination, Contract Management, Regulatory Compliance
- **Testing & Analysis:** FEA, Thermal & Vibration Testing, Structural Health Monitoring, Rail Track Inspections, Survey Benchmarking
- **Field & Construction:** Track Installation & Direct Fixation, Crew Coordination, Safety & Compliance, Quality Control & Assurance, Progress Reporting
- **Additional Skills:** Public Speaking, Contract Negotiation, Time Management, Process Optimization, Research & Technical Writing

## Professional Experience

### RailCantech, Track Field Engineer | Feb 2024 – Dec 2024

- **Lead track installation and direct fixation, managing teams, subcontractors, and materials,** including three **interns**, to meet **schedules, specifications, and regulatory requirements.**
- **Collaborate with departments and contractors to resolve challenges, ensure compliance with technical standards,** and align with **client expectations** through regular **progress reporting.**
- **Conduct inspections, maintain survey benchmarks, manage field changes, and monitor crew performance** using **KPIs** to enhance **productivity and quality.**

### National Research Council Canada, Researcher - Construction | Jan 2023 – Aug 2023

- Delivered actionable guidelines on **climate change impacts** for **critical infrastructure**, enhancing **project resilience.**
- **Collaborated with clients** to develop and test **bridge simulation software, improving efficiency and accuracy.**
- **Published** research on structural health monitoring at **ICCSTE'23 and IWSHM'23.**

### National Research Council Canada, Researcher - Advanced Electronics and Photonics | Sept 2022 – Dec 2022

- Collaborated on a **product development project** for a client, creating a **conductive paper prototype** designed to alert elderly users when to take their medications.

- **Designed** and **coded** the **prototype**, incorporating a flexible paper design that enhances **usability** and **comfort** for the target audience.
- **Investigated** and **implemented** strategies to improve the **durability** of the conductive paper, ensuring **reliable performance** over time.

#### Arabi Company W.L.L, Sales and Engineering Department Intern | Nov 2019 – Feb 2020

- Negotiated client meetings for **high-value sales presentations**, closing **deals exceeding \$500K**.
- **Streamlined order processing** by classifying raw materials and overseeing timely deliveries.
- Led billing and logistics operations, ensuring accurate invoicing and smooth delivery workflows.

#### Gulf Inspection International (PVT) Ltd., Materials Inspection Engineering Department Intern | May 2019 – Sep 2019

- **Conducted quality inspections** on \$3M worth of materials, including **pipes, poles, and transformers**, ensuring **compliance with standards**.
- **Performed detailed stress-strain and material analyses**, presenting **actionable insights** to supervisors.
- **Utilized SAP** to create **purchase orders, goods receipts, and work breakdown structures**, improving **operational efficiency**.

#### Education

- **University of Ottawa | Master of Engineering in Mechanical Engineering | Sept. 2021 – Aug. 2023 | CGPA: 9.77/10**
- **American University of the Middle East (AUM), Kuwait | B.Sc. in Mechanical Engineering | Sept. 2017 - June 2021 | CGPA: 3.77/4 (Dean's Honor Roll)**

#### Certifications and Awards

- **First Aid Certification** – Issued by St. John Ambulance Ontario
- **WHMIS 2015 Training** – Issued by AixSafety
- **Supervisor Health and Safety Awareness in 5 Steps** – Issued by The Ministry of Labour, Training and Skills Development
- **Hazard Communication Standard** – Issued by AixSafety
- **Sales Engineer Skills Certification** – UOttawa Engineering Sales School
- **Pilot Certificate for Small Remotely Piloted Aircraft System (RPAS)** – Transport Canada (Certificate number: PC2131096181)

#### Research Publications

- Istemi F. Ozkan, Daniel Cusson, Shahroz W. Shaikh, "**Satellite Monitoring of Transportation Infrastructure**," in Proceedings of the 14th International Workshop on Structural Health Monitoring (IWSHM'23), Stanford University, Stanford, CA, September 12-14, 2023. [Online]. Available: <https://iwshm2023.stanford.edu/proceedings>
- Istemi F. Ozkan, Husham Almansour, Shahroz W. Shaikh, "**Aging Concrete Slab on Steel Girder Bridges in Changing Climate**," in Proceedings of the 8th International Conference on Civil, Structural, and Transportation Engineering (ICCSTE 2023), Carleton University, Ottawa, Canada, June 4-6, 2023. DOI: <https://doi.org/10.11159/iccste23.195>