

ENGR. HAFIZ MUHAMMAD MUTASIM

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PROFESSIONAL SUMMARY

Results-driven Civil Engineer with experience in estimation, quantity take-offs, and project-based engineering across building and infrastructure projects. Proven ability to interpret technical drawings, prepare accurate cost estimates, and support bid submissions using industry-standard software. Strong background in site coordination, pavement condition assessment, and BIM-based engineering solutions, with a focus on quality, accuracy, and timely project delivery.

EXPERIENCE

MARHAMA GROUP LLC

Karachi, Pakistan

Estimation Engineer

Mar/ 2025 – Dec/2025

- Analyzed and interpreted interior finish bid-set drawings with a strong focus on flooring scope, specifications, and compliance requirements.
- Prepared accurate quantity take-offs, detailed layout plans, and cost estimates using RFMS, Measure Square, and Callidus, ensuring precision and efficiency.
- Designed optimized flooring layouts and developed competitive bids and technical proposals, supporting successful client submissions and project awards.

ENGINEERING CONSULTANT INTERNATIONAL PVT LIMITED (ECIL)

Karachi, Pakistan

Assistant Engineer

Jun/ 2024 – Feb/2025

- Spearheaded a provincial road network evaluation covering 81,000 km of carriageway for the CWD Government of Punjab, systematically documenting pavement deterioration and developing a comprehensive road asset database.
- Performed high-precision Pavement Condition Index (PCI) analysis for flexible pavements using Paver 7.0.9, ensuring 100% compliance with ASTM D6433-20 standards for structural health assessment and safety monitoring.
- Strengthened data-driven Road Asset Management Plans by integrating ASTM and AASHTO engineering standards, enabling accurate maintenance forecasting, lifecycle planning, and budget optimization for large-scale provincial infrastructure.

INTERNSHIP

ARIF & ASSOCIATES

Karachi, Pakistan

Engineering Intern

Apr/ 2024 – May/2024

- Strong understanding of structural design fundamentals, including load analysis and behavior of building structures.
- Hands-on experience with ETABS, SAFE, and AutoCAD for structural analysis, modeling, and detailing.
- Proficient in analyzing and designing structural components using concrete, steel, and timber, with knowledge of their structural properties

LUCKY ONE APPARTMENTS

Karachi, Pakistan

Site Engineering Intern

Sep/ 2022 – Oct/2022

- Executed structural material quantity take-offs and cost analysis, accurately estimating volumes for cement, sand, aggregates, concrete blocks, reinforcement, and formwork, ensuring precise material planning and budget control.
- Supported Bill of Quantities (BOQ) preparation, cost estimation, and project scheduling, assisting the Project Manager with site operations, resource allocation, and progress tracking to ensure on-time project delivery.
- Enforced professional ethics, safety regulations, and quality standards on-site, collaborating with cross-functional teams to implement quality control procedures and workplace safety protocols, reducing operational risks and improving compliance.

Site Engineering Intern

Feb/ 2022 – Mar/2022

- Applied advanced engineering principles to resolve complex on-site challenges, improving project planning, coordination, and progress monitoring to ensure timely delivery and compliance with project schedules across multiple work zones.
- Orchestrated comprehensive onsite inspections, evaluating construction processes, quality control (QC) metrics, and safety protocols to maintain high-standard compliance and operational excellence.
- Verified technical design integrity by auditing complex drawings and specifications, providing expert technical advisory services and real-time troubleshooting to ensure precision in field execution.

EDUCATION**Sir Syed University of Engineering and Technology (SSUET)**

Karachi, Pakistan

Bachelor of Science in **Civil Engineering**

19/Nov/ 2019 – 25/Apr/2024

- Among top **5%** of the batch
- Relevant coursework in [Relevant Subjects: Quantity Surveying, Construction Management and Transportation etc.]

TECHNICAL SKILLS

- **Estimation & Quantity Surveying:** High-Accuracy Flooring Estimation, Quantity Take-Offs, Bill of Materials (BOQ) Development, and Pre-Construction Bid Analysis.
- **Civil & Structural Engineering:** Structural Analysis & Design (ETABS, SAFE), Building Information Modeling (BIM/Revit), AutoCAD Technical Documentation, and Digital Twin Simulation.
- **Project Management & Planning:** Strategic Project Scheduling (Primavera P6), Critical Path Method (CPM), Progress Monitoring, Resource Allocation, and Project Lifecycle Management.
- **Advanced Technical Software:** Proficiency in RFMS, Measure Square, Callidus, Paver 7.0.9, Pyrosim, and Pathfinder (Evacuation Modeling).
- **Infrastructure & Asset Management:** Pavement Condition Index (PCI) Analysis, Road Asset Management Systems (RAMS), Traffic Data Analytics, and Compliance with ASTM D6433-20 & AASHTO Standards.
- **Technical Design & Interior Architecture:** Interior Finishes, Technical Specification Review, Material Procurement, and Quality Control (QC) Inspections.

FINAL YEAR PROJECT**“Preventive Necessity for Pakistan: Fire and Smoke Evacuation Modelling Integrated with BIM for Smart Building Planning”**

- Designed high-fidelity BIM models in Autodesk Revit, creating detailed floor plans, MEP systems, and reinforcement layouts while integrating custom load families to ensure architectural and structural accuracy.
- Simulated fire and smoke dynamics using Pyrosim, configuring specialized ventilation properties to analyze spread patterns and quantify safety risks within complex built environments.
- Engineered emergency evacuation scenarios in Pathfinder, actual situation creating during the fire and movement patterns to validate egress efficiency and verify compliance with fire safety standards.
- Pioneered VR integration for BIM visualization, bridging Virtual Reality with design tools to provide immersive stakeholder reviews, enabling real-time design modifications and interactive safety walkthroughs.

ACHIEVEMENTS

- Hafiz –E- Quran
- Partial Scholarship
- Bronze Medal in IEEE Competition
- Academic Record

CERTIFICATE

“Awareness Program On Quantity Surveying/Cost Engineering” Organized by Bunyad & Associates (Pvt.) Ltd & AACEI Pakistan Section Held on 18th January 2022 at Sir Syed University of Engineering and Technology (SSUET)