

FARHAN SALEEM

Department of Civil Engineering, NED University of Engineering and Technology, Karachi, Pakistan

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Proven educational and practical expertise in the following areas of Construction Project Management:

Project Planning and Scheduling, Project Estimation, Project Monitoring, Evaluation, Reporting & Control, Cash Flow Analysis, Delay analysis, Safety Management, Risk Management, Construction Process Re-engineering, Sustainability, and Smart Buildings

EDUCATION

PhD	Civil Engineering, North Dakota State University, Fargo, USA (CGPA: 3.88/4.0)	In progress
MS	Construction Engineering and Management, FIU, Miami, USA (CGPA: 3.82/4.0)	2008
MS	Computer Science, Karachi University, Pakistan	2002
B.E.	Civil Engineering, NED University of Engineering & Technology Karachi, Pakistan	1999

APPOINTMENTS

Jan 2020 – to date	Assistant Professor, Department of Civil Engineering, NEDUET, Pakistan
Jan 2014 – Dec 2019	Graduate Student, Department of Construction Management, NDSU, USA
Nov 2006 – Jan 2014	Assistant Professor, Department of Civil Engineering, NEDUET, Pakistan
Jan 2007 – Dec 2008	Graduate Research Assistant, Department of Construction Management, FIU, USA
Mar 2004 – Oct 2006	Project Management Consultant, SUR Construction (Plc.) Ethiopia
Jan 2002 – Feb 2004	Manager Planning and Development, TEAMS, Pakistan
Jan 2001 – Dec 2002	MS Student, Karachi University, Pakistan
Jun 1999 – Dec 2000	Design Engineer, Arif & Associates, Pakistan

SELECTED WORK EXPERIENCE

Assistant Professor, Department of Civil Engineering, NEDUET, Pakistan

- Taught following Undergraduate and Postgraduate courses;
Undergraduate Courses: Construction Planning, Scheduling and Control, Essentials in Construction Project Management, Construction Engineering

Postgraduate Course: Advanced Topics in Project Management, Project Management Framework & Tools,

Current Research Project:

- SMART Building Monitoring Using Digital Twin Technology
- SMART PPE: Enhancing Construction Workers' Safety through Smart Helmet Technology
- Energy Optimization of a Building using BIM and Structural Equation Modeling
- Procedural Tool for Analyzing Building Energy Efficiency: Structural Equation Modeling
- Efficient Energy Consumption in Institutional Buildings based on Predictive Optimization using IoT Task Management Mechanism.

Graduate Research and Teaching Assistant, Department of Construction Management & Engineering, NDSU, USA

Teaching Assistance Provided for following courses;

Construction Technology and Equipment, Financial & Cost Concepts for Construction Managers, Construction Estimating: Quantities and Costs, Construction Statics and Mechanics, Construction Specifications and Contracts, Construction Documents and Codes

Graduate Research Projects

- Land Development Proposal for City of Fargo. (Land Development)
- Decision Support System for Highway Infrastructure Maintenance Program using Life Cycle Cost Analysis. (Pavement Evaluation and Rehabilitation)

- The Performance Information Procurement System (PIPS) - A Best Value Procurement Process. (Construction Specifications and Contracts)
- Development of Structural Health and monitoring System for a Road Bridge. (Introduction to Intelligent Infrastructure)
- Review and Statistical Evaluation of an article from a peer-reviewed journal using two-way ANOVA and hypothesis test. (Applied Statistics)

Graduate Research Assistant, Department of Construction Management, FIU, USA

- Detailed Cost Analysis and Estimation of Dining Facility at University of Florida, Gainesville, FL
- Application of Value Engineering to reduce the overall cost for Residential House, Miami, FL.
- Assessment of bid procurement strategies and proposal for implementation of best value procurement system for the construction industry.
- Analysis of Non-Fatal Injuries And Illnesses Among Construction Workers Of Building And Heavy Construction Sectors of US Construction Industry.
- Assessing the optimum percent of design prior to commencing construction on Design-Build projects on the commercial and infrastructure section of Florida Construction Industry.
- “DRIVE TO 25” Application of DMAIC (Define, Measure, Analyze, Improve, and Control) for Spirit Airlines, USA, which is the five phase improvement cycle that has become increasingly common in Six Sigma organizations and used for process improvements

Project Management Consultant, SUR Construction (Plc.) Ethiopia

- Successful development and implementation of Construction Management System, which include following deliverables:
Project Management Area: Project Planning Procedures, Project Management Software, Target Setting Procedures, Monthly Progress Reporting Procedures, Daily Activity Log Procedures, Quality Control Checklists, Forecasting Techniques, Working Methodologies, Periodic Site Meeting Procedures and Earned Value Analysis Procedures.
Operations Management Area: Strategic Marketing Plan, Quality Management Plan, Health and Safety Plan, Risk Management Plan and Project Breakdown Standardization.
Contract Management Area: Tendering Stage Procedures, Team Development Procedures, Contract Management, Procedures, Change Control Management, Resource/Cost Monitoring Procedures, Performance Standards.
- Project Planning and Control of Highway and Building projects for over \$200 M value for ERA (Ethiopian Road Authority) and AACRA (Addis Ababa City Roads Authority)
- Provide assistance for analysis of claims and preparation for Contract Administration Division, SUR Construction (Plc.) Ethiopia
- Provide assistance for preparing Business Plan for SUR Construction (Plc.) Ethiopia

Manager Planning and Development, TEAMS, Pakistan

- Implementation of Computer Aided Project Management System for Production Planning and Resource Optimization for FC Engineering (Dollar Industries Pakistan)
Deliverables: Computer Aided Program Planning and Progress Reporting, Resource Optimization, Cost Budgeting and Cash Flows, Variance Analysis Reports
- Portfolio Management at Project Management Office for Techno Consult International, Pakistan
Deliverables: Multi-Project Management at multi-user environment, Computer Aided Program Planning and Progress Reporting, Cash Flow Analysis, Earned Value Analysis
- Project Management of 2nd 100 MGD K-III Project for Techno Consult International, Pakistan
Deliverables: Master Planning of proposed packages, Complete Document Control of project packages, Detailed Schedule for Construction of proposed packages
- Project Management of RBOD Extension from Sehwan to Sea for Mott McDonalds Pakistan (MMP)
Deliverables: Computer Aided Project Planning & Controlling, Control Level Scheduling of Contracts, Resource planning and Cost Budgeting

Design Engineer, Arif & Associates, Pakistan

Involved in structural analysis and design of various construction projects including;

- Jan textile mill,
- Silver Sands Shopping Mall,
- Design of Bungalows and Multi-Storied buildings.

RESEARCH EXPERIENCE

FUNDED RESEARCH

Development of a Strategic Model for Improvement of Construction Project Management Education, Research and Practice in Pakistan; Amount: **\$403,000.00 (\$130,000 for FIU and \$270,000 for Pakistan)**; Funded by United States Agency for International Development (USAID) and the Ministry of Science and Technology (MoST) Pakistan.

PUBLISHED RESEARCH

- 1) *"Analysis of workplace injuries among Hispanic construction workers due to safety hazards"*, 2007. Fifth LACCEI International Latin American and Caribbean Conference for Engineering and Technology (LACCEI' 2007) "Developing Entrepreneurial Engineers for the Sustainable Growth of Latin America and the Caribbean: Education, Innovation, Technology and Practice", Tampico, México, May 29 – June 1.
- 2) *"Risk Management Perceptions and Trends among Construction Contractors in Pakistan"*, 2007. Fourth International Conference on Construction in the 21st Century: Accelerating Innovation in Engineering, Management and Technology (CITC IV 2007), Gold Coast, Australia, July 11-13.
- 3) *"Developing Safety Culture in Pakistani construction industry – Site Safety Implementation and Safety Performance Improvement"*. Proceedings of the Second International Conference on Construction in Developing Countries (ICCIDC-II), "Advancing and Integrating Construction Education, Research & Practice", August 3-5, 2010, Cairo, Egypt.
- 4) *"Effectiveness of Worker Motivational Techniques on Construction Project Safety, Productivity and Quality Performance"* Sixth International Conference on Construction in the 21st Century (CITC-VI) "Construction Challenges In The New Decade", July 5-7, 2011, Kuala Lumpur, Malaysia.
- 5) *"Financial Health of the Construction Industry of Pakistan - A Perspective of Major Stakeholders"*. Sixth International Conference on Construction in the 21st Century (CITC-VI) "Construction Challenges in the New Decade", July 5-7 2011, Kuala Lumpur, Malaysia
- 6) *"Benchmarking of Client's Financial Management Practices in the Construction Sector of Pakistan"*. International Conference on Structural Engineering, Construction and Management (ICSECM 2011), December 15-17, 2011, Kandy, Sri Lanka
- 7) *"An Empirical Assessment of Building Information Modeling as an Emerging Technology in the Pakistani Construction Industry"*, Third International Conference on Construction in Developing Countries (ICCIDC-III), "Advancing Civil, Architectural and Construction Engineering & Management", Bangkok, Thailand, July 4-6th, 2012
- 8) *"Key Causes of Construction Disputes in Pakistan"*, Third International Conference on Construction in Developing Countries (ICCIDC-III), "Advancing Civil, Architectural and Construction Engineering & Management", Bangkok, Thailand, July 4-6th, 2012
- 9) *"A Comparative Study Between Schedule Based Costing & Traditional Costing Techniques- Case Study of a Building Project"*, Third International Conference on Construction in Developing Countries (ICCIDC-III), "Advancing Civil, Architectural and Construction Engineering & Management", Bangkok, Thailand, July 4-6th, 2012

- 10) *"An Empirical Assessment of Decision Making in the Public Procurement Lifecycle 2022"*, The Twelfth International Conference on Construction in the 21st Century (CITC-12), Amman, Jordan, May 19-19, 2022
- 11) An Exploratory Computational Piecewise Approach to Characterizing and Analyzing Traffic Accident Data, International Journal of Modern Research in Engineering & Technology, Vol. 1, Issue 1. June, 2016
- 12) Design Changes in Construction Projects – Causes and Impact on the Cost, Civil Engineering Journal, Vol. 5, No. 7, July, 2019

CORPORATE TRAINING

Training Delivered in the discipline of **Computer Aided Project Management** for following organizations:

- SUR Construction Plc, Ethiopia
- FC Engineering (Dollar Industries) Pakistan
- Quaid-e-Awam Engineering University, Nawabshah, Pakistan

CONFERENCE AND WORKSHOPS ORGANIZED

Conference Coordinator and member organizing committee of the "First International Conference on Construction in Developing Countries-ICCIDC-I" jointly organized by Department of Civil Engineering, NED University of Engineering and Technology, Karachi and Florida International University Miami, FL

Member organizing committee of the "Local Workshop on Improving Construction Project Management Practices in Pakistan: Assessment of Research Findings and The Way Forward" organized by Department of Civil Engineering, NED University of Engineering and Technology Karachi, Pakistan

Member organizing committee of the "Local Workshop on Advances in Construction Engineering, Management and Implementation Practices: the US Experience" organized by Department of Civil Engineering, NED University of Engineering and Technology Karachi, Pakistan

Conference Coordinator of the "Second International Conference on Construction in Developing Countries-ICCIDC-II" jointly organized by Florida International University Miami, FL, Department of Civil Engineering, NED University of Engineering and Technology, Karachi and MSM, Misr for Services & Maintenance Construction Engineering Services, Cairo, Egypt

COMPUTATIONAL SKILLS

Primavera Project Planner, MS Project, @RISK, MS Office Suite, ArcGIS

REFERENCES

Will be furnished upon request.