

Summary

Highly motivated with more than ten years of experience in the Architecture, Engineering, and Construction (AEC) industry. Accomplished in overseeing construction practice and design principles through all phases of projects including planning, design, construction, building performance analysis, and financial close-out with a strong research background in the AEC industry most critical topics. My research objectives are to explore human behavior with regard to the built environment using emerging technologies, such as BIM and VR, which may allow to test, anticipate, and design for patterns of human use on one hand, and eliminate some of the construction projects primary litigation causes; such as, change orders, schedule delays, and safety measures.

Education

May 2021	TEXAS TECH UNIVERSITY	LUBBOCK, TEXAS, USA
CIVIL ENGINEERING (Construction Engineering and Management); GPA: 3.96		
DOCTOR OF PHILOSOPHY		
August 2020	TEXAS TECH UNIVERSITY	LUBBOCK, TEXAS, USA
ENVIRONMENTAL DESIGN (Architecture); GPA: 3.98		
DOCTOR OF PHILOSOPHY		
May 2018	HARVARD GRADUATE SCHOOL OF DESIGN	ONLINE PROGRAM
ARCHITECTURE (The Architectural Imagination)		
GRADUATE CERTIFICATE		
MAY 2017	TEXAS TECH UNIVERSITY	LUBBOCK, TEXAS, USA
CIVIL ENGINEERING (Construction Engineering and Management); GPA: 4.0		
MASTER OF SCIENCE		
MAY 2014	TEXAS TECH UNIVERSITY	LUBBOCK, TEXAS, USA
ENVIRONMENTAL DESIGN; GPA: 4.0		
MASTER OF SCIENCE		
MAY 2014	TEXAS TECH UNIVERSITY	LUBBOCK, TEXAS, USA
CONSTRUCTION ENGINEERING AND MANAGEMENT; GPA: 4.0		
GRADUATE CERTIFICATE		
MAY 2011	THE INTERNATIONAL CENTER FOR PEDAGOGICAL STUDIES	SEVRES, FRANCE
LANGUAGE AND LITERATURE		
DIPLÔME D'ÉTUDES EN LANGUE FRANÇAISE		
MAY 2010	UNIVERSITY OF CONSTANTINE	CONSTANTINE, ALGERIA
ARCHITECTURE AND BUILDING ENGINEERING; GPA: 3.8		
STATE ARCHITECT-ENGINEER (5 years dual degree)		

Related Coursework

Healthcare Facilities Design
Construction Management
Sustainable Construction
Building Systems
ENVD Psychology

Occupational Safety and Health Admin
BIM and 4D/5D Modeling
Construction Scheduling
MEP/HVAC
Education and Research Facilities Design

Applied Research Methods
Construction Cost Estimating
Construction Delivery Methods
Architectural Engineering Design
Statistics and Data Analysis

Skills

- Site and environmental analysis
- Space planning
- Interior and Environmental design
- Strong technical detailing skills
- Construction methodology
- Design and Construction Cost Estimating
- Design and Construction Scheduling
- Land use planning
- Strong conceptual and schematic design skills
- Concrete and masonry expertise
- Construction management and CPM
- Excellent time management
- Excellent conflict and problems resolution skills
- Excellent communication skills
- Microsoft Office Package
- Navisworks
- Revit- BIM
- 3D Studio Max
- Auto Cad
- Adobe Photoshop
- Cost Estimating- Sage Timberline
- Microsoft Project Planer
- Primavera P6
- Microsoft Project
- E4 Clicks
- eBuilder

Work Experience

January 2018 to **Senior Project Manager for Capital Projects – Facilities Planning, and Construction.**
Current **Texas Tech University System**

- Develop the baseline schedule.
- Develop the project's preliminary cost estimate.
- Supervise the design and construction teams throughout all project phases.
- Drive the project from inception to completion, within the scope, budget and the high standard of quality that is consistent within the TTUS.
- Work with the Vice Chancellor to develop a realistic budget and schedule. Use resources to justify data used in both the budget and the schedule.
- Working with users, design team, and contractors work to be the team leader relating to the establishment of program scope and technical requirements, quality control procedure and production efforts.
- Work with FP&C administrators to develop all constructing documents to hire all partners required to complete the work.
- Minimize scope changes by working with the users and the team in developing the initial scope and program for the project.

- Provide executives with summary information as requested.
- Focus on deliverables including quality of plans and specifications, submittals, and material section.
- Lead effective communication, cooperation and trust to achieve project management maturity.
- Focus on identifying and solving problems early, quickly and cost effectively.
- Measure and compare project completion with baseline and monthly CPM schedule.
- Perform the post occupancy evaluation.

Selected Projects:

- Texas Tech University School of Veterinary Medicine - \$105 Million
- The Jones AT&T Stadium Athletics Administrative Offices - \$9.5 Million
- The Lubbock Auditorium and Coliseum demolition - \$2.5 Million
- The Womble Basketball Practice Facility - \$29 Million
- The Texas Tech University Football Training Facility - \$40 Million
- The Jones AT&T Stadium South End Zone renovation - \$60 Million
- Texas Tech University Health Sciences Center School of Medicine extension, the University Center, and the Academic Event Center – \$72.5 million

**August 2017 to May 2018 Graduate Teaching Assistant
Texas Tech University Health Sciences Center**

- Advanced Design and Construction Studio
- BIM and 4D Modeling

**July 2014 to January 2018 Facilities and Construction Project Manager - Office of Planning, Design, and Construction.
Texas Tech University Health Sciences Center**

Responsible for all the design and construction aspects of the following Texas Tech University Health Sciences Center projects:

- Research facilities.
- Higher education facilities.
- Clinical labs.
- Urgent care facilities.
- Operating rooms.
- Building automation systems for healthcare facilities.
- HVAC/MEP for healthcare facilities.
- Landscape and respite spaces.
- Parking lots.
- Miscellaneous civil work.

**September 2013 to December 2013 Texas Tech Graduate School
Architectural Designer**

- Designed and estimated the cost of remodeling and renovation of the graduate student center at Texas Tech University.

September 2010 to November 2011 **CAU-Yinineb**
State Architect Engineer

- Discussed design standards and procedures with the directors of architecture and engineering.
- Collaborated with builders to insure construction was in line with construction documents.
- Coordinated the project team in the development of preliminary and final design documents.
- Completed formal design intent and construction documentation.
- 1250 apartment units.
- Multiple federal government buildings.

February 2010 to June 2010 **CAU-Bouabdallah**
Assistant Project Planner

- Designed water forms, vegetation, walks, and other landscape features for urban projects.
- Acted as led designer for small site and landscape enhancements for urban projects.

January 2009 to January 2010 **REAL GHERABA T.C.E. & CIES GROUP**
Assistant Project Manager

- Reports on status of design process and cost analysis.
- Collaborated with builders to see that construction was in line with drawings and designs.

Professional Responsibilities

August 2017 to May 2019 **American Society for Engineering Education, Lubbock Chapter**
President

March 2017 to August 2017 **American Society for Engineering Education, Lubbock Chapter**
Vice President

- VP for Strategic Initiatives. TTU Lubbock chapter.
- Initiative Development and Execution.

March 2017 to August 2018 **Texas Tech University Graduate School**
Academic and Professional Development Advisor

- Academic and Professional Development for the TTU Graduate School Advisory Council.

Research Interest

- The use of BIM and IVR to support the decision-making process in the AEC industry
- Computer Integrated Construction: VR and BIM integration, collaborative systems, human-computer interaction, implementation issues
- Construction delivery processes optimization and control measures

- Evidence based green construction using BIM
- Healthcare facilities' design, construction, and management
- The Interior environment's impact on human behavior

Honors and scholarships

- Award of excellence and student of the year, University of Constantine
- Recipient of the Study Abroad Paris Scholarship, Texas Tech University
- TTU Summer Dissertation Scholarship, Texas Tech University
- CJ Davidson HS Scholarship, Texas Tech University
- TTU CEET Construction Engineering Scholarship
- Recipient of the Award for best Design of the Graduate Student Center at Texas Tech University
- Member of the Honor Society of Phi Kappa Phi at Texas Tech University
- TTU Talkington Graduate Presidential Fellowship
- TTU WCOE engineering design Scholarship
- TTUHSC Award of excellence in construction management
- The Golden Key International Honor Society
- Tau Beta Pi – The Engineering Honor Society
- Quality Staff and Project Management Excellence Award
- 2nd best research at the TTU graduate student research competition 2018
- Helen Jones Graduate Scholarship 2018
- 1ST place at the TTU graduate student research competition 2019
- TTU Devitt Jones Presidential Fellowship 2019
- TTU Graduate School Presidential Fellowship in Engineering 2020
- College of Human Sciences spotlight of the year 2020

Scholarly Work

Selected Conference Proceedings

- Gheraba, A. IAFOR International Conference on Education, “AN EVIDENCE BASED GREEN DESIGN USING BUILDING INFORMATION MODELING”, Dubai, UAE. (2016)
- Gheraba, A, 5th Macro Conference on Technology and Innovation, “Employing Building Information Modeling and Virtual Reality to Support the Decision-Making Process in the Planning, Design, and Construction Industry” Paris, France. (2017)
- Gheraba, A, American Society of Engineering Education, “Causes, effects, and control measures of changes orders in the Architecture, Engineering, and Construction industry” Austin, Texas. (2018)
- Hossein, M & Gheraba, A, American Society of Engineering Education, “Zero Net Energy Buildings” Tampa, Florida. (2019)
- Hossein, M & Gheraba, A, American Society of Engineering Education, “Ethics, Safety , Responsibility, and Sustainability in Construction Engineering Education” Tampa, Florida. (2019)

Papers in Preparation

- Gheraba, A., Pati, D., Darwish, M., Nejat, A., “Causes, Effects, and Control measure of Changes orders in the U.S. Construction Industry” Planned submission: Automation in Construction.

- Gheraba, A., Pati, D., Darwish, M., Nejat, A., “A Comparative Analysis of Visualization Methods in Construction: Employing Virtual Reality to Support the Decision-Making Process in the AEC Industry”
Planned submission: Building and Environment.

Certificates and Licenses

- Licensed Architectural Engineer: State Board of Licensure for Architects and Engineers – Algeria. 000918-10/7967.
- ACBM Abatement Contractor Supervisor NESHAP Trained Person – State of Texas 100.004.547.135.
- OSHA 40 Hours Trained Person – State of Texas.

References

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School of Veterinary Medicine
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Language Skills

French: native tongue/Fluent
Arabic: native tongue/Fluent
English: graduate studies/Fluent