

Holds a B. Sc. in Civil Engineering and has over 2 years hands-on experience working as Structural BIM Engineer.

PERSONAL DATA

Nationality : Egyptian
Gender : Male
Residence : Helwan, Cairo

EDUCATION

: B. Sc. in Civil Engineering, Helwan University, 2016

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office (Word, Excel), Internet

TRAINING COURSES AND CERTIFICATIONS

: Revit Structure essentials & advanced course.
: Revit Structure Certified Professional (2015).
: Robot Structural Analysis course.
: Autodesk Advance Steel course.
: English Language course in AUC – current level: A2C.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Sep. 2016 till now
Employer : Assaf Group Consultant
Projects :

- Double Tree Hilton (White Palace):
 - Hotel exists in Saudi Arabia consists 2 basements, ground, mechanical floor, mezzanine, 7 floors and roof with approximate total area 48,500 m2.
 - I was a part of the team that responsible for structural design of the hotel and BIM modeling LOD300.
 - The structural design was based on ACI, ASCE and SBC codes.
 - All building documents are out of Revit model.

- BIM coordination between architecture and structure.
- Al Gobair Residential Building: A residential building consists of 2 basements, ground and 8 typical floors & roof. I Participated in structural design based on ACI 318-14 and ASCE codes, creating structural drawings and create the structural BIM model to generate the structural drawings, bill of quantities and coordination.
- Misr El-Khair Administrative Building: An administrative building consists of 2 basements, ground and 4 typical floors & upper roof. I Participated in design based on ECP, creating structural drawings and create the structural BIM model to regenerate the drawings from BIM model.
- October Mall: A mall consists of ground, first and second floors, I Participated in design based on ECP, creating the structural BIM model to generate the drawings, BOQ and clash detection.
- Administrative Center for Finance and Business at the Administrative Capital: An administrative building consists of basement, ground and 4 typical floors & upper roof, the task was to create reinforcement shop drawings, I led the structural team in creating the shop drawings from Revit, we succeeded in creating full shop drawings out of Revit with LOD400 model.

Job title : Structural BIM Engineer

- Job Description** :
- Structural design of reinforced concrete and steel structures, reinforcement detailing and take offs, BIM coordination with other disciplines using Revit, BIM implementation and development.
 - Reinforced concrete design for villas, commercial malls, hotels, residential buildings & etc. according to ECP & other codes.
 - Steel design for quite simple projects like stages, sign boards, portal frames and etc.
 - Developed structure design workflow from CAD to BIM using Revit, Advance steel, Robot, Etabs and other programs.
 - BIM implementation team leader with collaborative structural team, responsible for Revit documentations revision, Revit families creation, Revit modelling, adjusting Revit analytical model with fixing any related issues, developing collaborative workflow between Revit & analysis programs, developing bi-directional link between Revit, analysis programs (Robot, Etabs & etc.) and Autodesk Advance Steel for steel detailing.
 - BIM shop drawings for reinforcement using 3D reinforcement in Revit.
 - Concrete, reinforcement & steel take offs.
 - BIM Coordination with other disciplines through Revit.

Dates : From Feb. 2018 till now (part time)

Employer : BIM Solutions Center

Job title : Instructor

- Job Description** :
- Teaching Dynamo for Revit course, the course content is 20 hours, explaining how to create different types of scripting for all disciplines to increase productivity, making complex modeling, automated annotations, speed systematic tasks and thinking out of box in any problem related to Revit.
 - In additions, I had experience in teaching Autodesk Advance Steel and AutoCAD Structural Detailing, also ability to teaching Revit structure and Autodesk Robot Structural Analysis.

- Autodesk Certified Instructor.

Dates : From Apr. 2017 till now

Job Description : Freelancing Work:

- Working as Freelancer for many types of projects include (Structural design of RC and Steel structures, converting CAD files into BIM models for structural, architecture & MEP projects, coordinate multi disciplines using both Revit & Navisworks, reinforcement shop drawings and bar bending schedules, quantity surveying, steel shop drawings, mechanical shop drawings & coordination. I work in projects from freelancing websites and other personal relations in Egypt.
- Projects samples:
 - Ministries Buildings at the Administrative Capital (B19 & 20):
 - ❖ The ministries consist of 2 basements, ground, 7 floors and roof with total area 195,700m², the project is outsourcing from Al-Grably as the project contractor and the main consultant is Dar and sub consultant Shaker for MEP works.
 - ❖ My scope of the work is MEP Full shop drawings (HVAC, Plumbing, firefighting, Chilled water and water supply), coordination between all mechanical and electrical works and structural elements with generating MEP composite plans.
 - ❖ All drawings are out from Revit model with complete coordination and BOQ.
 - New Giza City shop drawings out of BIM models: I work in creating BIM shop drawings for New Giza City buildings, the buildings are town and twin houses and it is required to create concrete dimensions and reinforcement shop drawings based on BIM model (LOD400), also making Dynamo scripts to speed the work.

Field of experience : • Profile:

- Structural BIM Engineer with successful background in design both reinforced concrete and steel structures, using collaborative BIM design workflow.
- Structural BIM Leader with successfully developed the structural design workflow from CAD to BIM in current work.
- BIM Developer using Dynamo for Revit to increase and speed productivity.
- BIM coordination between architecture, structure and MEP.
- Skills Matrix:
 - Revit Structure / Revit Architecture & MEP / Dynamo / AutoCAD / Autodesk Robot Structural analysis / Etabs / Safe / SAP 2000 / Autodesk Advance Steel / Tekla Structures / Navisworks / AutoCAD Structural Detailing / Fusion 360 / Reinforced concrete design / Steel Design / RC shop drawings / Steel fabrications / 4D BIM modeling / Revit Structure Certified Professional 2015 / BIM leader / Prokon / IDEA StatiCa / Hilti Profis / CSI Columns.
- Self-Developed Skills:
 - Dynamo Coding for all disciplines in Revit, especially using Dynamo for creating automated 3D reinforcement in complex and traditional concrete shapes, complex modeling, any systematic tasks and annotations.

- Reinforced concrete & steel structures modelling and design using Autodesk Robot Structural Analysis program with generating a detailed calculation note according to many built-in international codes.
- Revit, Robot, Advance Steel & Navisworks interoperability.
- Developing my knowledge of international design codes like (ACI, ASCE, AISC, Euro code).
- Using Autodesk Navisworks for 4D & 5D BIM modeling, clash detection, bill of materials and animation.
- Using Autodesk Robot, IDEA StatiCa and Hiliti Profis to design any type of steel connections.
- BIM modelling using Revit for structural, architectural & MEP with good experience in multi-disciplines coordination.
- Steel structures shop drawings & bill of materials using Autodesk Advance Steel.
- MEP BIM modelling, coordination and shop drawings using Revit.