

M Ravi Chandra Sekhar

☎ +91 - 8125809532

✉ madgulachandu390@gmail.com



POSITION APPLIED FOR:- COMPUTATIONAL DESIGNER/ DYNAMO DEVELOPER

Career Objective

To work in a globally competitive environment on challenging tasks that shall yield the twin benefits of the job satisfaction and a steady paced professional growth.

Professional Summary

- Preparation of HVAC Shop drawings in Revit (Placing annotations, dimensions, etc.)
- Creating customized Revit families as per client specification
- Creating the presentation of the project with the help of Walkthrough view.
- Implementing BIM Levels of Development from LOD 100 to LOD 500 as per project scope
- Preparing RFI's for complicated areas where services cannot be accommodated within the ceiling Height.
- Developing **Dynamo scripts** for architecture, structure and mechanical disciplines.
- Autodesk **DynamoPython Scripting** and **RevitAPI** certified by BIM Era
- Strong coordination skills that help in Liaising with all BIM project members
- Worked on **BIM 360**.
- Maintaining the Phases of the project as per project plan.
- Critical thinking, self-motivated and able to work independently
- Problem solver and passionate to learn new technologies.
- Update the scripts in Dynamo Player and share it with the teams.
- Critical thinking, self-motivated and able to work independently

Technical Skills:

- Proficiency in using **AutoCAD, Dynamo, Revit MEP, Navisworks.**
- Familiar with the **MS Word, MS Power Point and MS Excel**

Educational Qualification

- **Bachelor of Technology in Mechanical Engineering** (Year of Passing : 2017-July) from Institute of Aeronautical engineering, Hyderabad

Present Experience

- Organization Name : **Arth Design Build India Pvt. Ltd,**
- Location : **Hyderabad, India**
- Designation : **BIM Engineer**
- Working Period : **July 2019 – Till date**

Previous Experience

- Organization Name : **Jitesh Engineering Solutions**
- Location : **Hyderabad, India**
- Designation : **Jr. Bim Modeler**
- Working Period : **January 2018– June 2019**

PROJECTS WORKED:

1. AUTOMATION PROJECT (Dynamo): PMU (PRE FABRICATED MECHANICAL UNIT)

Description: Prefabricated mechanical unit is an equipment that is integrated into a sub-assembly off-site and then installed on site. The project involves four different types of Quality checks which is to be done through dynamo when PMU's are placed in corridors and different areas of the building. They are as follows:

- **Installation Space Check:** Developed a dynamo script which can measure the distances between different services placed on tiers. Quality checks fails if they are not as per standards and the information gets exported it to excel.
- **Future Maintenance Space:** Developed a dynamo script to check the Minimum Clear Space to be provided between two prefabricated units and their distances from the adjacent walls. Quality check fails if they are not as per standards and the information gets exported it to excel.
- **Co-ordination Compliance Check:** Developed a dynamo script for specific coordination principles such as Pipes should avoid running above cable trays, etc. and quality check information is exported to excel.
- **Ceiling and Headroom Clearance Check:** Developed a dynamo script for Ceiling clearance norms like Clear Space between Top of Ceiling to Bottom of Any Services and Bottom of Services to Clearance for Headroom are to be checked and information is exported to excel
- **Creating views:** Developed a Dynamo script which can create Lateral and Longitudinal section views, 3d views for the PMU's placed in the corridor and placing them into the respective sheets.

BIM PROJECTS:

- **TAURUS ZENTRUM:** It is a commercial project containing 7 floors and 2 basements. Project scope was to develop the model from LOD 100 to LOD 500.
- **BARCLAYS BANK:** It's a As-built model containing two buildings (G2 and R1) and project scope was to update the model as per site changes.
- **HAMAD INTERNATIONAL AIRPORT:** It's a airport project and scope was to do coordination with all the disciplines, creating schedules and sheets.
- **SALESFORCE OFFICE:** It's a commercial project and scope was to update the model upto LOD 300 as per the inputs provided by the design consultants.

Job Responsibilities (Dynamo and BIM):

- Developed a dynamo script which can place all the level based Air terminals, floor and ceiling mounted lights in the model as per elevation by taking information from Autocad.
- Developed a dynamo script which can place wall mounted thermostats in rooms and in floor based areas, places all the VCD'S in branch ducts at some required offset
- Developed a script which can place all the power sockets, LMS, FAS, PAS devices at required location.
- Developed a dynamo script which does modeling of conduits as per Autocad Line diagram.
- Developed a dynamo script which can add all the shared parameters from excel file, creates schedules for ducts, pipes, etc for all the floors and places them into their respective sheets.
- Developed a dynamo script which can model the entire firefighting service as per Autocad.
- Developed a script which can place the smoke detectors, speakers, hooters, fire alarm devices in the ceiling at once.
- Developed a script which can place all the upright sprinklers below slab at an offset of 200mm and pendent sprinklers in the required ceiling.
- Developed a script which can place duct supports at a distance of 1500 mm from each other.
- Developed a dynamo script which can place all the Duct tags, Equipment Tags, Pipe tags and aligns them in a proper order vertically and horizontally.

- Developed a script which can place column, duct dimensions to nearest grid or walls
- Developed a script which can identify navis clashes in Revit by placing a sphere at the clash area.
- Developed a script for model clean up such as removing unwanted filters, sections, AutoCAD files, templates, line patterns, etc. which can make the model run faster.
- Developed a script which adds insulation for ducts, pipes, rename sheets, rename numbering and places all the elements in the respective worksets.
- Developed a script which does quality check for smoke and fire dampers which are not placed exactly in fire rated walls.
- Developed a script which identifies which identifies the fittings of wrong levels, shoe necks which are in wrong direction and toggles grid bubbles to Top and left right positions.
- Developed a script which can align all the walls of particular floor to the bottom of slab at once.
- Developed a script which can provide plastering of walls, floor finishes, fire exit risk assessment, etc
- Developed a script for Recreating a topography with updated points from cad.
- Developed a script which creates filters as per ISO standards and applies it to the required views.
- Modeling of H-vac, Fire and Plumbing layouts as per inputs.
- Preparation of Coordinated services sections & Support Detail Drawings.
- Setting up project browser, Project coordinates, project parameters, templates, filters etc.
- Analyzing the Levels of Duct, Pipes, Cable Trays and FCU's, VAV's, Equipment etc. accurately to provide clash free 3d model
- Co-ordinating with architecture, structure, electrical teams to identify the issues before itself to avoid repetitive work.
- Prepare the Bill of Quantity for Ducts, Pipes, Cable Trays, bus bars & Mechanical Equipment's.
- Preparation of MEP Services Clash free Models & clash Report by using Navis Works and exporting to Excel

Personal Details

- Marital Status : Unmarried
- Languages Known : English, Telugu, Hindi
- Nationality : Indian
- Date of Birth : 24-10-1995
- E-mail Address : madgulachandu390@gmail.com
- Address : 23-5-746, Beside venkat rao school, Laldarwaza, Hyderabad, Pincode-500065

Declaration: I hereby declare that the above information and particulars are true and correct to the best of my personal knowledge and belief.

Date: 5/24/2021

(M. RAVI CHANDRA SEKHAR)