Project Portfolio

About Me

Name: Prasad Fegade
Role: Architectural and Structural / BIM Professional
Skills: AutoCAD, Revit (Architectural and Structural), Dynamo, BIM Coordination (Navisworks), Construction Drawings, Documentation

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Project 01 – 11 Residential Building (Scan to BIM) Project (LOD350)

Location: Europe Based
Project Type: Existing Building / Scan to BIM

Project Description

This project involved converting laser-scanned point cloud data into an accurate BIM model to represent existing building conditions. The scope included interpreting scan data, validating dimensions, and developing coordinated Architectural and Structural Revit models suitable for documentation, coordination, and future renovation or design modifications.

The BIM models were created to reflect as-built conditions, including architectural components such as walls, floors, ceilings, doors, and windows, along with key structural elements like columns, beams, slabs, and foundations. Careful attention was given to level accuracy, alignment, and model cleanliness to ensure reliable multidisciplinary coordination.

The final deliverables supported facility management, renovation planning, and design coordination by providing precise digital representations of both architectural and structural systems.

Responsibilities

- Imported and managed point cloud data within Revit
- Developed accurate Architectural and Structural models based on scan data
- Created custom Revit families aligned with point cloud geometry for accurate as-built representation
- Created structural elements including columns, beams, slabs, and foundations
- Verified dimensions, levels, and geometry against point cloud data
- Maintained BIM standards, naming conventions, and model organization
- Generated plans, sections, elevations, and schedules from the model
- Performed clash coordination between Architectural, Structural, and MEP models
- Identified, analysed, and supported resolution of clashes to improve model accuracy

Tools Used

Revit | Point Cloud Data (Recap) | AutoCAD | Navisworks

Key Highlights

- Delivered coordinated Architectural and Structural as-built BIM models
- Supported renovation and multidisciplinary coordination workflows

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Project 02 – Workshops Project (Scan to BIM) (LOD 300)

Location: Europe Based
Project Type: Existing Building / Scan to BIM

Project Description

This Scan to BIM project focused on developing an accurate BIM model from laser scan point cloud data exclusively to understand existing spaces for renovation planning. The scope of work was limited to model creation only, with no requirement for construction drawings or documentation.

The Revit model was developed to reflect existing as-built conditions, enabling stakeholders to visualize spatial relationships, assess constraints, and evaluate renovation feasibility. Emphasis was placed on accuracy, correct level setup, and clean modelling to support reliable design decision-making.

The model served as a digital reference for space planning and coordination during the early stages of renovation, helping teams analyse existing conditions efficiently before moving into detailed design phases.

Responsibilities

- Imported and managed point cloud data in Revit
- Created accurate architectural elements based on scan data
- Verified spatial dimensions, levels, and geometry
- Maintained a clean, well-organized BIM model
- Supported spatial analysis and renovation planning through the BIM model

Tools Used

Revit | Point Cloud Data

Key Highlights

- Accurate model developed for renovation space analysis
- Enabled clear understanding of existing conditions without drawings

Project 03 – Scan to BIM Renovation Study Project (Discipline Worksets) (LOD 300)

Location: Europe Based
Project Type: Existing Building / Scan to BIM

Project Description

This Scan to BIM project involved creating a coordinated BIM model from laser scan point cloud data to support renovation space analysis. The model was developed without producing drawings and was organized using discipline-based Worksets to clearly separate Architectural, Structural, and MEP elements.

The primary objective was to provide a clear understanding of existing spatial conditions and system layouts for renovation planning. Discipline-wise Worksets improved model clarity, coordination readiness, and future usability for design development and clash coordination.

The BIM model enabled stakeholders to visualize spatial relationships, identify constraints between systems, and make informed renovation decisions during early design stages.

Responsibilities

- Imported and managed point cloud data in Revit
- Created Architectural, Structural, and MEP elements based on scan data
- Organized the BIM model using discipline-specific Worksets
- Verified spatial accuracy, levels, and geometry across all disciplines
- Supported coordination and renovation analysis through a structured BIM model

Tools Used

Revit | Point Cloud Data

Key Highlights

- Discipline-based workset organization for clear coordination
- Model developed specifically for renovation analysis without drawings

Project 04 – Residential Building (Scan to BIM) Project (LOD 350)

Location: Europe Based
Project Type: Existing Building / Scan to BIM

Project Description

This project involved converting laser-scanned point cloud data into an accurate BIM model to represent existing building conditions. The scope included interpreting scan data, validating dimensions, and developing coordinated Architectural and Structural Revit models suitable for documentation, coordination, and future renovation or design modifications.

The BIM models were created to reflect as-built conditions, including architectural components such as walls, floors, ceilings, doors, and windows, along with key structural elements like columns, beams, slabs, and foundations. Careful attention was given to level accuracy, alignment, and model cleanliness to ensure reliable multidisciplinary coordination.

The final deliverables supported facility management, renovation planning, and design coordination by providing precise digital representations of both architectural and structural systems.

Responsibilities

- Imported and managed point cloud data within Revit
- Developed accurate Architectural and Structural models based on scan data
- Created structural elements including columns, beams, slabs, and foundations
- Created custom Revit families aligned with point cloud geometry for accurate as-built representation
- Verified dimensions, levels, and geometry against point cloud data
- Maintained BIM standards, naming conventions, and model organization
- Generated plans, sections, elevations, and schedules from the model
- Performed clash coordination between Architectural, Structural, and MEP models
- Identified, analysed, and supported resolution of clashes to improve model accuracy

Tools Used

Revit | Point Cloud Data (Recap) | AutoCAD | Navisworks

Key Highlights

- Delivered coordinated Architectural and Structural as-built BIM models
- Supported renovation and multidisciplinary coordination workflows

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Project 05 – Residential + Commercial Building (CAD to BIM Project) (Architectural & Structural) (LOD 350)

Location: Europe Based
Project Type: Existing Building / Scan to BIM

Project Description

This CAD to BIM project involved converting 2D CAD drawings into a fully coordinated BIM model with detailed Architectural and Structural elements at LOD 300–350. The scope included accurate modelling, creation of detailed parametric families, and production of construction documentation.

The Revit model was developed based on approved CAD layouts, sections, and details, ensuring dimensional accuracy, consistency, and compliance with project standards. Custom parametric families were created for architectural and structural components to support design intent, documentation accuracy, and future revisions.

The final BIM model was used to generate coordinated drawings and schedules, supporting construction documentation and interdisciplinary coordination.

Responsibilities

- Converted 2D CAD drawings into detailed Revit BIM models
- Developed Architectural and Structural models at LOD 300–350
- Created detailed parametric Revit families for architectural and structural components
- Maintained family parameters, naming conventions, and BIM standards
- Generated plans, sections, elevations, details, and schedules
- Coordinated Architectural and Structural models to resolve clashes
- Ensured drawing accuracy and consistency with BIM outputs

Tools Used

AutoCAD | Revit

Key Highlights

- Detailed parametric family creation for accurate documentation
- Coordinated CAD to BIM workflow with construction-ready outputs

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Additional Experience

- BIM support and documentation for multiple small-scale projects
- Drawing audits and standardization support

Software & Technical Skills

- AutoCAD
- Revit (Architecture and Structure)
- Dynamo
- Navisworks
- Civil 3D (Surface / Landscaping)
- Recap
- BIM 360 / ACC (if applicable)

Contact Information

Email: prafegade@gmail.com
Phone: +91-7038231253 / 8788300004
www.linkedin.com/in/prasadfegade1503
