AMRUTHA R HOYSALA

Motivated professional eager to take on challenging assignments and new responsibilities, with a focus on developing computational skills to enhance efficiency and drive productivity.

CONTACT

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PERSONAL INFORMATION

- Date of birth: 22-08-1997
- Gender: Female
- Nationality: Indian
- Marital status: Married

HOBBIES AND INTERESTS

- Reading
- Traveling
- Listening to music

CERTIFICATIONS

- Intern at Brigade Groups, Bengaluru - 6 weeks - Site work
- Intern at Kaushik Consultancy Private Ltd, Mysuru - Road Survey Risk Management - NIE, Mysuru

EXPERIENCE

Structural Engineer

JURONG CONSULTANTS INDIA - Bengaluru

07/25

- Execute design and analysis of mixed-use building for construction stage.
- Collaborate with BIM team to generate comprehensive drawings.
- Developed spreadsheets and batch files to streamline design specifications, improving usability and efficiency.

ACCESS DESIGNS SOLUTIONS PVT LTD. - Bengaluru

11/19 -06/25

- Execute design and analysis of reinforced concrete and post-tensioned elements during conceptual, schematic, and detailed stages.
- Conducted peer reviews of PT slabs ensuring compliance with New Zealand council regulations.
- Designed steel members and specified connection intents to fulfill project specifications.
- Experience in Australia, New Zealand, the Middle East, and the UK projects with a fair understanding of regional building codes and guidelines.
- Collaborate with BIM team to generate comprehensive drawings.
- Developed spreadsheets and batch files to streamline design specifications, improving usability and efficiency.
- Develop computational skills to increase efficiency.

EDUCATION

2019

B.E Civil

The National Institute of Engineering - Mysuru

GPA: 9.32, CGPA

Gold Medalist – Top performer of the batch

SKILLS

- Structural design analysis
- Post-tensioned and reinforced concrete systems
- Steel structural design
- Computational optimization with basics of Python
- Finite element modelling
- Spreadsheet proficiency
- Expertise in SAFE, ETABS, RAM Concept, RAPT, and RAM Connection

PROJECTS

Project & Code	Description
Perfume Factory, London Code: Eurocode and UK annex	Project consists of 3 towers with Block A (16 levels), Block B (10 levels), Block C (13 levels) ➢ Designed slabs and transfer systems ensuring compliance with Eurocode provisions. ➢ Applied bending theory and strut-and-tie methodology for transfer slabs. ➢ Performed column design using TCC spreadsheets and verified with ETABS outputs. ➢ Ensured fire resistance requirements per Eurocode standards. Tools: ETABS, SAFE, TCC spreadsheets
Olympia Pillar Hall, London Code: Eurocode and UK annex	➢ Designed steel canopy structures for kitchen plant and West Hall building. ➢ Applied wind and snow loads manually as per Eurocode and UK Annex. ➢ Designed steel baseplates using RAM Connection and provided intent sketches for member connections Tools: ETABS, RAM Connection, spreadsheets
Saadiyat Island Development (The Groove), UAE Code: ACI	Building with 2 basement levels, ground floor, and 10 upper floors (13 levels) ➢ Designed basement, ground, and upper slabs using SAFE. ➢ Coordinated with architectural team to finalize solutions best suited for structural performance and constructability. ➢ Designed columns and walls using ETABS, incorporating load combinations and structural requirements. ➢ Accounted for temperature effects per ACI standards. Tools: ETABS, SAFE, spreadsheets
East Village North (Qiddiya), UAE Code: ACI	A multi-building project comprising six structures of varying sizes and floor counts, including two blocks with two floors each and four blocks ranging from 7 to 9 floors, all featuring a basement and ground floor. ➢ Designed slabs, columns, and walls for multi-building project. ➢ Coordinated with architectural team to finalize solutions best suited for structural performance and constructability. ➢ Accounted for temperature effects per ACI standards. ➢ Collaborated with geotechnical team to satisfy foundation and soil requirements based on site conditions. ➢ Analysed complex transfer systems using RAPT and flagged construction instructions as necessary for execution and cross-verified transfer systems using strut-and-tie checks. ➢ Designed and analysed steel canopy structures using ETABS to finalize member sizes and ensure structural stability. ➢ Developed baseplate connection designs using RAM Connection. ➢ Performed detailed analysis of complex façade-to-slab connections to assess their impact on adjoining structural elements such as slabs and walls. Tools: ETABS, SAFE, RAPT, RAM Connection
Solaya, Dubai Code: ACI	A multi-building project comprising nine structures of varying sizes and floor counts. A penthouse upper level on each tower with a canopy roof to be designed.

	➢ Designed and analysed steel canopy structures using ETABS to finalize member sizes and ensure structural stability. ➢ Developed baseplate connection designs using RAM Connection. ➢ Designed embedment plate connection (steel member to wall) Tools: ETABS, RAM Connection, Idea Statica
Crow's Nest Site B, Sydney Code: AS	Upper structure (11 floors) built on existing structure as a part of planned development ➢ Designed PT systems for tender stage slabs and beams. ➢ Analysed transfer systems based on pile capacity. ➢ Finalized column sizes using load rundown calculations. Tools: RAPT, RAM Concept, Bluebeam
1 Church St Dubbo, Sydney Code: AS	Building with 2 basement levels, ground floor, and 13 upper floors (16 levels) ➢ Designed post-tensioned slabs and produced detailed reinforcement drawings to guide site construction. ➢ Overcame challenges in constructible tendon layout for landscaped slabs with deep set-downs, ensuring structural integrity and ease of execution. Tools: RAPT, RAM Concept, Bluebeam
8 Phillip St, Sydney Code: AS	High-rise building with 9 basement levels, ground floor, and 65 upper floors (75 levels) ➢ Designed post-tensioned slabs and prepared detailed reinforcement drawings; provided technical support to resolve construction queries. ➢ Accounted for axial shortening in slab design and developed A-frame walking columns to meet architectural constraints on lower levels, performing structural analysis using ETABS. ➢ Conducted strut-and-tie analysis for transfer systems to ensure safe load transfer and compliance with design standards. Tools: RAPT, RAM Concept, Bluebeam, ETABS
Canberra Institute of Technology, Woden campus Sydney Code: AS	Building with a basement, ground floor & 5 upper floors (7 levels) ➢ Designed post-tensioned slabs and prepared detailed reinforcement drawings for construction. ➢ Addressed challenges from complex landscapes and intricate transfer systems, ensuring constructible tendon layouts. ➢ Mitigated restraint effects from capping beam at ground floor by introducing construction and expansion joints, improving tendon efficiency and overall slab performance. Tools: RAPT, RAM Concept, Bluebeam
Lorne St Student Accommodation, New Zealand Code: NZ and AS	Existing super structure was demolished, and 14 levels was built on retained substructure ➢ Conducted peer review of post-tensioned slab designs as a third-party reviewer for municipal approvals, ensuring compliance with applicable standards and codes. ➢ Provided comprehensive feedback and identified areas for correction to maintain structural integrity and regulatory compliance. ➢ Collaborated with the New Zealand design team to facilitate client discussions and achieve consensus on critical design aspects.

	Tools: RAM Concept, Bluebeam
Northbrook Wynward, New Zealand Code: NZ and AS	Building with 2 basement levels, ground floor, and 12 upper floors (15 levels) ➢ Designed post-tensioned systems for tender stage to 80DD%, including sizing of slabs and beams to meet performance and cost objectives. ➢ Accounted for high seismic demands in New Zealand, ensuring slabs could resist lateral loads in compliance with local codes. Tools: RAM Concept, Bluebeam
Junction Thrive, Adelaide Code: AS	Building with a basement level, ground floor, and 7 upper floors (9 levels) ➢ Supported project from 30% design development stage, providing frameworks to accommodate transfer load systems and sizing post-tensioned slabs and beams. ➢ Coordinated with multidisciplinary teams to deliver site-friendly drawings, ensuring constructability and compliance. ➢ Reviewed shop drawings and resolved site-related issues, maintaining design integrity and smooth execution. Tools: RAPT, RAM Concept, Bluebeam, ETABS
699 Park, Melbourne Code: AS	Building with 2 basement levels, ground floor, and 7 upper floors (9 levels) ➢ Designed a complex post-tensioned floor plate with varying boundary conditions, including basement restrained by secant piles, accurately modelling tendon behaviour and accounting for additional prestress losses. ➢ Addressed challenges in tendon profiling due to a complex landscape system, band beam and one-way slab configuration at ground floor, and integrated transfer beams into the analysis. ➢ Performed separate analysis for each floor to reflect unique boundary conditions and verified temporary construction load effects on all floor plates. ➢ Automated punching shear checks for numerous columns by developing a Python-based batch analysis tool, significantly reducing manual effort and improving design efficiency Tools: RAM Concept, Bluebeam, Python, spreadsheets
Bowen Hills, Brisbane Code: AS	Building with 2 basement levels, ground floor, and 9 upper floors (12 levels) ➢ Analysed preliminary structural geometry and coordinated with architectural drawings to ensure compliance ➢ Performed design checks for transfer and transition columns using RAPT and basic strut and tie checks to ensure load transfer and structural integrity. Tools: RAPT, RAM Concept, Bluebeam
Noida International Airport, India/Hong Kong Code: IS	An Airport in India Developed detailed calculation and design spreadsheets for structural elements, including: ➢ Composite columns ➢ Reinforced concrete (RC) columns ➢ Steel member design Tools: Spreadsheets