

Yatong Nie

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Results-driven digital engineering professional with a PhD in Civil Engineering and a proven track record of implementing successful digital twin solutions in complex infrastructure projects.

EMPLOYMENT

Digital Engineering Coordinator / Manager June 2023-Present
Gamuda Australia

1. Spearheaded the delivery of project digital implementation. Closely collaborating with the Design Managers to ensure adherence to quality, timeline and profit objectives.
2. Managed client and stakeholder expectations, maintaining effective communication with the project team.
3. Monitored and evaluated designers' progress, ensuring all work met project requirements. Actively involved in the design approval process, efficiently resolving issues and maintaining project standards.
4. Receiving Notable Practice commendation during a project audit for exemplary performance and adherence to standards.

Projects: *M1 - Raymond Terrace Extension project, \$1.6B, NSW, Australia*

Digital Engineer July 2022- June 2023
WSP Australia

1. Lead and facilitate coordination among design teams, contractors, and government stakeholders throughout all project phases. Conduct regular coordination meetings with project teams.
2. Perform technical reviews of project deliverables and ensure compliance with Project Information Requirements (PIM).
3. Supported contractors in planning and executing project delivery activities using 4D construction staging/simulation.
4. Design and develop automated tools to streamline the process of model review, clash detection and asset management.
5. Direct the innovation project on embodied carbon reporting directly from IFC schema. Investigate and implement best practices on carbon reporting for infrastructure projects.

Projects:

South Geelong to Waurn Ponds Railway Duplication, \$700M, VIC, Australia

Transport Access Programs: Station Upgrades (Killara Station, Turrella Station, Mascot Station and Tuggerah Station)

Commuter Car Park projects (Leppington, Edmondson Park South and North), NSW, Australia

Graduate Digital Specialist May 2021- July 2022
Digitise Consulting

1. Developed and implemented procedures for the management of digital information and inspections of 3D federated model throughout project lifecycle.

Projects: *M5 Motorway, M6 Motorway Stage1, Great Western Highway Upgrade, Mamre Road Upgrade etc.*

2. Established and executed rule-based clash detection and manage issues identified till resolution.
3. Designed and developed programs and applications using Python, SQL, Automate flow, Power Apps and Power BI to enhance project delivery efficiency and internal company workflow productivity.
4. Conducted and managed comprehensive investigations of IFC and BCF format files to ensure quality and compliance and facilitate data transformation.

PROJECTS

South Geelong to Waurn Ponds Railway Duplication Oct 2022 – June 2023
Digital Engineering Coordinator/Manager

1. Lead and facilitate weekly BIM coordination meetings, leveraging Revizto's advanced features to ensure effective communication and coordination among project teams.
2. Designed and implemented an innovative IFC metadata extraction tool and visual analytic dashboard, which have enabled the project team to quickly and accurately analyse and validate large volume of metadata.
3. Translate incoming IFC files for Revit integration to coordinate with different design teams.
4. Configured and optimized the project's BIM platforms, including Revizto, Anvil, and BIM 360.

Transport Access Programs July 2022 – June 2023
Digital Engineer

1. Develop and implement Digital Engineering Execution Plan (DEXP) for the projects.
2. Perform technical reviews of project DE deliverables including federated models, asset register and metadata, ensuring compliance with project requirements and standards.
3. Develop and update 4D sequence animation according to program updates from planning team on a monthly basis.
4. Support and verify the VPR submissions.

EDUCATION

Doctor of Philosophy |Civil Engineering Apr 2018 – Feb 2022
UNSW Sydney