

Position Description - 3D Visualisation Modeller

POSITION DETAILS

Department / Team: Information and Technology	Reports to (title): 3D Visualisation Manager
# Direct Reports: 0	# Indirect Reports: 0
Location: Brisbane	Salary Banding: AO6

THE CROSS RIVER RAIL PROJECT

The Cross River Rail Delivery Authority is building a new 10.2km rail line that includes 5.9km of twin tunnels running under the Brisbane River and CBD; with four new underground stations at Boggo Road, Woolloongabba, Albert Street and Roma Street.

Once complete, it will provide trains with a much-needed alternative rail path through the core of the current SEQ Rail network, unlocking a bottleneck and allowing more trains to run more often across the whole of South East Queensland.

The Cross River Rail Delivery Authority is also delivering multiple supporting projects and activities in conjunction with Department of Transport and Main Road. These include accessibility rebuilds for eight surface stations, construction of three new stations on the Gold Coast; upgrades for stabling yards; track works and surface rail enhancements; and the introduction of a new ETCS digital signalling system.

Further Information: www.crossrivelrail.qld.gov.au

OUR VALUES AND BEHAVIOURS



WE COLLABORATE

- We treat each other with respect and speak up when this doesn't happen.
- We share information to help everyone be successful.
- We have honest conversations, no agendas or surprise.
- We are curious, asking questions to understand.
- We work through issues together and help each other.



WE INNOVATE

- We are inclusive, listening to and encouraging differing views.
- We challenge and push the boundaries.
- We apply and share our knowledge to do better.
- We seize our opportunity to set new standards and benchmarks.



WE DELIVER

- We act safely at all times.
- We do what we say we will do and when we will do it.
- We understand our individual role and how it fits into the project's success.
- We take responsibility for our work and speak up when we need help.
- We are committed to continuous development and take every opportunity to review, learn and improve the way in which we are delivering the project, learn and improve.



ROLE OVERVIEW

The focus of this position is to support development of the Delivery Authority's current Unreal Engine 3D Visualisation and Gamification model. The position will also develop a range of outputs for and from the model and related datasets for the Cross River Rail Delivery Authority. This role will provide support to the 3D Visualisation team, along with the wider project team and project stakeholders in the implementation as part of the broader Digital Network Approach (DNA) Strategy.

The position reports to the 3D Visualisation Manager.

KEY RESPONSIBILITIES

- Develop and manage CRRDA's visualisation libraries, scene files and folders, in an organised and efficient manner, to ensure a consistent approach to datasets management and 3D model outputs.
- Develop visualisation and gamification processes and procedures to ensure reliable and efficient visualisation management and 3D model development.
- Actively participate in the development and continuous improvement of the Delivery Authority's visualisation environments; Digital Network Approach; and other Delivery Authority processes and procedures with a focus on the upgrade to Unreal Engine.
- Collaboratively provide project visualisation support to the Delivery Authority's teams delivering client-led projects.
- Maintain and continue to develop the Delivery Authority's Unreal Game Engine 3D visualisation model, using Architectural and Engineering Design.
- Create high-end 3D model content for all aspects of 3D Visualisation including the management of the Delivery Authority's 3D visualisation model, 3D and 4D Animation, real-time 3D information integration, photo simulations, motion graphics, virtual reality, and multimedia outputs.
- Work collaboratively with the Specialised Services team, utilising data from a variety of digital sources, to support the implementation of the Digital Network Approach.
- Support other Visualisation tasks as required by the 3D Visualisation Manager.
- To work in accordance with the Delivery Authority policies, procedures and safety requirements and demonstrate alignment with our values and behaviours

KEY COMPETENCIES

The successful candidate will be able to demonstrate the following key competencies:

- Demonstrated 3D infrastructure model creation and management skills in real-time gaming engines preferably Unreal Engine.
- Demonstrated proficiency in 3ds Max as a core modelling application, including the ability to interpret architectural drawings and to produce, edit and optimise models for real-time use.
- Demonstrated skills in 3D visualisation model design development, creation and application of realistic materials, mapping and lighting to scene files, and preparation of camera angles and animations.
- Demonstrated skills in scripting and automation of 3D model development and updating – whether writing, adapting or reusing scripts – to reduce repetitive work, improve workflows and help solve production problems. Excellent time management skills with the ability to work autonomously or within a team environment.
- Strong communication skills with a demonstrated ability to interact with a variety of internal and external stakeholders.
- Previous experience with any of the following providing visualisation support to the engineering, construction or environmental sectors; Datasmith workflows; Blueprint; MetaHuman pipelines; UI/UX or HUD work in Unreal; and Git or similar version-control systems