ROBERT WHITE

9 Anderson Avenue, Ashgrove 4060 QLD | M: 0478 636 739

E: rob@smashingpixels.com.au

Senior Software Engineer

Specialized in Unreal Engine, Game Development, and 3D Visualization

Professional Summary

Highly experienced software developer with over 15 years in game development, 3D visualization, and real-time rendering. Expertise in Unreal Engine, Unity3D, and GIS technologies, with a strong background in leading development teams and delivering complex 3D applications.

Technical Skills

✓ Game Engines: Unreal Engine (C++, Blueprints), Unity3D

✓ Programming: C++, C#, TypeScript, React

✓ 3D Technologies: GIS, Cesium, OpenGL, Computer Vision

✓ Cloud & DevOps: Azure, AWS, GCP, CI/CD

✓ Version Control: Git, Perforce

✓ Additional Skills: 3D Modeling, Animation, UI/UX Design

Professional Experience

Owner Developer | Smashing Pixels Pty Ltd

July 2015 - Present Notable Projects:

Vertex Animation Toolset (2024 - Present): Co-developing an Unreal Engine plugin for high-performance character animation

- Engineered a solution for converting skeletal animations to vertex animations while maintaining quality
- Developed efficient GPU-based rendering system using mesh instancing
- Created custom components including Vertex Anim Mesh Component and Instanced Mesh Component
- Implemented animation control systems and asset management solutions
- Built editor tools for visual crowd management and configuration

Chef-mate.app (2024 - Present): Developing a full-stack SaaS product for Al-powered cooking

- Architected and implemented full-stack solution using Azure backend and Claude LLM
- Developed Al-powered features including recipe generation, ingredient chat, and image recognition
- Created shopping list management system and user engagement features
- Built scalable architecture supporting multiple Al integrations

LinkdTourism.com Al Integration (November 2024 - Present)

- Managed, designed, and planned AI integrations for the tourism platform
- Led implementation of Al-powered features to enhance user experience
- Coordinated cross-functional teams to deliver AI solutions

Unitystation: Led open-source recreation of Space Station 13

- Managed community of 500+ members and 30 developers
- Implemented complex networking solutions using UNET
- Collaborated with industry veterans including Dean Hall (DayZ creator)

Project Engineering Manager | Terrestrial Software Development

April 2022 - January 2024

Led development of "Endora," a 3D open-world asset-ownership game built in Unreal Engine

- Managed a cross-functional team of engineers, artists, and designers
- Established and maintained technical architecture and development workflows
- Implemented Agile methodologies and sprint planning processes
- Oversaw integration of blockchain technology for asset ownership
- Coordinated with stakeholders to align technical decisions with business goals
- Led code reviews and established coding standards
- Managed resource allocation and technical debt
- Implemented performance optimization strategies
- Supervised build pipeline and deployment processes
- · Mentored junior developers and facilitated knowledge sharing

Senior Software Developer | Urban Circus Pty Ltd

April 2017 - March 2022

Developed 3D visualization applications for urban planning using Unreal Engine and Unity3D

- Created real-time 3D visualization solutions for city planning projects
- Integrated GIS data with game engine technologies
- Developed custom tools for importing and processing large-scale 3D datasets
- Collaborated with 3D artists to optimize assets and improve rendering performance
- Implemented VR/AR solutions for architectural visualization
- Created custom shaders and materials for realistic urban environments
- Built automated pipeline tools for data processing and scene generation
- Developed real-time lighting and shadow solutions for large-scale environments

Education & Certifications

- Certificate III Telecommunications
- Certificate II Information Technology
- Certificate I Engineering

Technical Proficiencies

- Development: Unreal Engine C++, Blueprints, Unity3D, React TypeScript
- Cloud Services: Azure (Cloud Services, DevOps, Functions), AWS, GCP
- 3D Technologies: Cesium, OpenCV, Computer Vision
- Tools: Git, Visual Studio, Rider, Perforce