GEO AR

Geo AR, 101 Pakenham Street West,
Wynyard Quarter, Auckland 1010

GEO AR – Horizon Europe Collaboration Profile

Geo AR is an impact-driven creative-technology studio specialising in serious games, augmented reality (AR), and digital twins that translate complex research into powerful public engagement tools.

Founded in Aotearoa New Zealand and we collaborate globally with scientists, we collaborate with scientists, universities, cultural organisations, and government agencies to turn scientific knowledge into accessible, interactive experiences for communities, policymakers, and learners.

Our mission is to make science, culture, and sustainability understandable and actionable through immersive, research-backed digital experiences.

Who We Work With

- Universities and research institute
- Horizon Europe consortia
- Government departments and environmental agencies
- City and regional authorities
- Cultural institutions, museums, NGOs
- Schools, youth groups, community organisations
- Government stakeholders and research institutes engaging with environmental, cultural and social issues

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Horizon Europe Fit (2026–2027)

- Cluster 2 – Culture, Creativity, Inclusive Society
- Cluster 3 – Civil Security for Society
- Cluster 4 – Digital, Industry & Space
- Cluster 5 – Climate, Energy, Mobility
- Cluster 6 – Food, Bioeconomy, Natural Resources, Environment
- Missions – Climate Adaptation; Soil Health; Oceans & Waters; Climate-Neutral & Smart Cities

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Key Capabilities

• Serious-game design, AR/XR simulation, applied storytelling
• Translation of scientific datasets into intuitive interactive models
• Co-design with researchers, communities and Indigenous knowledge holders
• Behaviour-change design, evaluation and analytics

• Digital twins of real communities, ecosystems and urban futures
• Learning design, e-learning content, evaluation and impact reporting
• Scalable deployment (mobile, web, AR frames, public installations)
• Rapid prototyping, user testing and iterative development
• Proven deployment across cities, parks and public spaces worldwide

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Selected Project Portfolio

My Coastal Futures - Earthsciences (formerly NIWA)
An interactive simulation developed with NIWA scientists, helping communities understand sea-level rise, storm events and climate adaptation pathways. Used by councils and schools for planning conversations.

Township Flood Challenge – Earthsciences (formerly NIWA)
A hydrology-based game using real flood-risk data to help players understand catchments, mitigation strategies and the consequences of land-use decisions.

Future Coasts Aotearoa – Earthsciences (formerly NIWA)
A community-focused educational game teaching coastal hazards, early warning, and localised risk understanding based on NIWA research.

Kiwi Kai – Manaaki Whenua Landcare Research and Science Learning Hub
A sustainable farming and biodiversity game co-designed with researchers. Players test regenerative farming choices, environmental impacts, and trade-offs across a whole-farm ecosystem.

Sandflat Heroes – Marine Discovery Centre in Leigh and University of Auckland
An AR experience teaching intertidal ecology using scientific data from New Zealand estuarine environments.

Stand Tall – IHC
A game supporting financial literacy and life-skills learning for youth with disabilities, developed through extensive co-design.

Cat Angels Triumph – The New Zealand Cat Foundation
A behaviour-change game improving public understanding of microchipping, desexing and responsible cat ownership. Backed by vets, animal behaviourists and welfare groups.

Magical Park – GeoAR
A global AR outdoor gaming platform activating parks in over 140 cities, encouraging physical activity, community engagement and digital inclusivity.

What's the Plan, Stan? – New Zealand Civil Defence and Natural Hazards Commission
A disaster-preparedness AR game teaching hazard awareness, bag-packing decisions and emergency planning.

Benefit Sharing Compass – University of Waikato
An interactive tool visualising Indigenous data governance and benefit-sharing models for scientists and policymakers.

The Wizard World of Numbers - University of Auckland

The Wizard World of Numbers is a playful digital adventure that helps children — including learners with cerebral palsy — build early numeracy skills through interactive challenges and magical characters.

Evidence of Research Contribution

Geo AR specialises in transforming scientific research into public-facing tools that enhance dissemination, engagement and impact.

Our academic and research partnerships include:

- NIWA – climate, coastal hazards, hydrology, risk communication
- Manaaki Whenua Landcare Research – regenerative farming systems
- University of Waikato – Indigenous data sovereignty and benefit sharing education
- Wageningen University & Massey University – regenerative farming game workshop

• Marine Discovery Centre in Leigh and the University of Auckland – Marine ecology education

• University of Auckland– Numeracy skills education for learners affected by cerebral palsy
• Victoria University of Wellington – Behavioural design and evaluation collaborations

Our projects have been used in schools, community workshops, public planning sessions, and national media. Independent science journalist Jamie Morton has covered the impact of our NIWA collaborations, highlighting their value for public climate literacy.

Infrastructure & Resources

• Full in-house game development, AR pipelines, and deployment systems
• Narrative design, e-learning, behaviour-change design, UX testing
• Cultural advisory frameworks grounded in Te Ao Māori
• Analytics, data-collection, and impact-measurement tools
• Expertise in designing for constrained public spaces

Key Personnel

Melanie Langlotz – CEO
35+ years in creative technology. Leads innovation in immersive simulations, digital twins and public-impact games.

Carol Taka – Producer & Digital Cultural Adviser
Māori game designer and producer ensuring cultural authenticity, Indigenous integration and co-design methodologies.

Dr Miranda Verswijvelen – Senior Narrative & Learning Designer
PhD in game narrative for learning. Designs emotionally resonant, research-aligned learning experiences.

Finley Power – Game Designer
Bachelor of Creative Technologies. Specialist in UX/UI, playful systems, accessible mechanics and AR interaction.

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Holly Franklin - Head of Strategy

Holly has a MBA in commercialization. She specialises in business modelling, idea/ business sustainability plans, commercialization pathways, stakeholder adoption strategy, market readiness, regulatory and financial planning.

Tyrone Mills - Developer

Tyron has bachelor degrees in software engineering and molecular biology. Specialist in game design and development covering a variety of platforms and game genres and visualising scientific data in to easy to understand interactive models.