

# Temirlan Dzhoroev

📍 Seoul, South Korea 📩 dzhoroev1@gmail.com ☎ +82-10-7393-2412 💬 mastertim.xyz 🌐 master-tim 🌐 dev-tima

## Experience

Redbrick Inc.	<i>Seoul, South Korea</i>
<b>Full-stack AI Engineer &amp; Technical PM</b>	<i>Jul 2024 – present</i>
○ Built an <b>AI game creation system</b> from the scratch, enabling prompt-based content generation, which contributed to securing <b>\$1.2M R&amp;D investment in Korea</b> .	
○ Developed multiple <b>AI agents</b> with diverse creative and functional purposes.	
○ Optimized code generation pipelines, reducing token usage by <b>80%</b> .	
○ Designed and enhanced <b>save, update, and remix features</b> for seamless content iteration.	
○ Implemented <b>ad integration</b> , allowing creators to monetize games and metaverses effortlessly.	
○ Integrated <b>Unity WebGL support</b> , expanding platform compatibility with Unity applications.	
○ Delivered a new, modern <b>UI framework</b> , improving overall UX and design consistency.	
○ Migrated core packages to modern libraries, boosting scalability and performance.	
<b>3D Engine Engineer (Web 3D Engine)</b>	<i>Jul 2023 – Jul 2024</i>
○ Refactored legacy code, improving scalability and maintainability.	
○ Built and maintained a <b>web-based 3D Studio Engine</b> with a clean, modern UI.	
○ Integrated <b>Blockly</b> , enabling no-code/low-code content creation.	
○ Implemented <b>WebXR support</b> , unlocking AR/VR development in the browser.	
○ Added <b>AI code assistants</b> , helping creators generate and debug scripts faster.	
○ Partnered with external AI companies to integrate <b>text-to-model</b> and <b>text-to-avatar (3D)</b> features.	
○ Improved onboarding by addressing <b>new user pain points</b> , boosting adoption and usability.	
○ Shipped <b>10+ online 3D web games</b> , reaching over <b>1M+ total plays</b> .	
UNIST — DECS Lab.	<i>Ulsan, South Korea</i>
<b>Research assistant &amp; Embedded systems engineer</b>	<i>Mar 2021 – Mar 2023</i>
○ Designed and developed expressive robotic faces to enhance HRI & HCI.	
○ Programmed and debugged embedded systems for interaction research.	
○ Authored 6 conference papers, 4 journal articles, and co-filed 6 patents.	

## Education

UNIST — Ulsan National Institute of Science and Technology	<i>Feb 2023</i>
<i>MS in Design (Human Computer Interaction)</i>	
○ Lotte Scholarship	
UNIST — Ulsan National Institute of Science and Technology	<i>Feb 2021</i>
<i>BS in Computer Science and Industrial Design</i>	
○ Global UNISTAR Silver Scholarship	
Korea University	<i>Aug 2018 – Feb 2019</i>
<i>Korean Language and Literature (Intermediate level)</i>	

## Skills

<b>Technical:</b> JavaScript, TypeScript, Python, C++, React, Next.js, Three.js, WebGL, Node.js, REST APIs, RAG integration, AI agents, text-to-model, text-to-avatar, ML pipelines, LangChain, vector databases, LLM fine-tuning, embeddings	
<b>Soft:</b> Product management, UX/UI design, creative, problem solving, cross-team collaboration, multilingual (English, Korean, Russian)	

## Publications

---

<b>Developing a Dynamic Expression Model That Can Simultaneously Control Robot's Facial and Movement Expressions</b>	2024
Park, H., Lee, J., <b>Dzhoroev, T.</b> , Kim, B., & Lee, H. S. <i>Journal of Institute of Control, Robotics and Systems</i> , 30(1), 8–12	
<b>The Implementation and Analysis of Facial Expression Customization for a Social Robot</b>	2023
Lee, J., Park, H., <b>Dzhoroev, T.</b> , Kim, B., & Lee, H. S. <i>The Journal of Korea Robotics Society</i> , 18(2), 203–215	
<b>Human Perception on Social Robot's Face and Color Expression Using Computational Emotion Model</b>	2023
<b>Dzhoroev, T.</b> , Park, H., Lee, J., Kim, B., & Lee, H. S. <i>IEEE RO-MAN 2023</i> , pp. 2484–2491	
<b>Expanded Linear Dynamic Affect-Expression Model for Lingering Emotional Expression in Social Robots</b>	2023
Park, H., Lee, J., <b>Dzhoroev, T.</b> , Kim, B., & Lee, H. S. <i>Intelligent Service Robotics</i> , 16(5), 619–631	
<b>An Expressive Eye Interface for Pedestrian Interaction with Indoor Mobility</b>	2022
<b>Dzhoroev, T.</b> , Park, S.Y., Park, H.E., Lee, J.Y., & Lee, H.S. <i>ICROS</i> , pp. 267–268	
<b>Driving Performance Improvement and Recognition Algorithm Development of a Pedestrian for Indoor Shared Mobility (Korean)</b>	2022
Park, S.Y., <b>Dzhoroev, T.</b> , Yoon, S.H., & Lee, H.S. <i>ICROS</i> , pp. 400–401	
<b>Comparison of Face Tracking and Eye Tracking for Scrolling a Web Browser on Mobile Devices</b>	2022
<b>Dzhoroev, T.</b> , Kim, B.H., & Lee, H.S. <i>HCI Korea</i> , pp. 227–231	
<b>Design Guidelines for Contextual Awareness and Management of Hygiene in Daily Life with Infectious Viruses</b>	2021
Jang, S.S., Lee, S.H., <b>Dzhoroev, T.</b> , Kim, T.Y., Oh, H.J., Kim, N.R., & Park, Y-W. <i>Archives of Design Research</i> , 34(3), 101–121	
<b>Interactive System Design in Everyday Life to Improve the Perception of Environmental Hygiene Information in Pandemic Situations (Korean)</b>	2021
Kim, N.R., Lee, S.H., Oh, H.J., <b>Dzhoroev, T.</b> , & Park, Y-W. <i>KSDS</i> , pp. 256–257	
<b>DayClo: An Everyday Table Clock Providing Interaction with Personal Schedule Data for Self-reflection</b>	2020
Lee, K-R., Ju, S., <b>Dzhoroev, T.</b> , Goh, G., Lee, M-H., & Park, Y-W. <i>DIS'20</i> , pp. 1793–1806	

## Certifications & Awards

---

<b>Advanced React</b>	<i>Meta</i>
<b>Principles of UX/UI Design</b>	<i>Meta</i>
<b>Three.js Journey</b>	<i>Three.js Journey</i>
<b>Algorithmic Toolbox</b>	<i>UC San Diego</i>
<b>Korean Language</b>	<i>Korea Univercity</i>
<b>First degree diploma in Physics National Olympiad</b>	<i>Ministry of Education of Kyrgyzstan</i>