



Erdenebat Battseren

AI x HCI Engineer | Automotive Technology | UI/UX For Future Mobility

 **Loc**
Tokyo, JP

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Profile

Multidisciplinary engineer with a strong foundation in AI, HMI/HCI, and mobility technologies. Interned at BMW Group JP and Bosch Germany, contributing to AI, UI/UX for vehicle interfaces and advanced display systems. Driven to human-centered design, emotionally intelligent mobility solutions through AI and UX. Fluent in Japanese, English and Mongolian with global exposure across Asia and Europe.

Core Skills & Tools



Programming Languages
Python, JS, TS, Matlab, Dart, C++, bash



Frameworks
React, Flutter, Next.js, Firebase



Data Science
PyTorch, TF, NLP, Computer Vision, Multimodal Transformers



Design
Figma, InDesign, MadMapper, TouchDesigner
PS, Illustrator, After Effects, Blender, CAD



Soft Skills
Design Thinking, Project Management, Agile Teamwork, Prototyping



Languages
Mongolian (native), English (IELTS 8), Japanese (N1), German (B1)

Education

Apr 2024 – Present

@Institute Of Science Tokyo

Master of Engineering

- Major in Engineering Science & Design
- Minor in Data Science & Artificial Intelligence
- Researching Parameter-Efficient LLM training methods
- Tonen International Foundation Scholar

Apr 2020 – Mar 2024

@Tokyo Institute Of Technology

Bachelor of Engineering

- Major in Transdisciplinary Science & Engineering
- MEXT Japanese Government Scholar
- Valedictorian of 2024 Graduate
- Best Independent Research Award
- Poster Presentation in Eurocom AI Conference 2024 June
- Conference Presentation SensUs 2024
- Poster Presentation at BMW Summer School 2024 at Chiemsee

Work Experience

Jan 2024 – Present

@BMW Japan Corp.

Research Engineer at BMW Tech Office JP

Outside-In

- Market Research in AI, Autonomous Driving, Robotics, Future Computing topics
- BMW Startup Garage - Startup Scouting

In-Vehicle UI/UX

- Technical lead for UI/UX Concept Development of APAC Innovation Car (AIC) - DualHUD
- Technical lead for UI/UX Content Generation for MAIC car, orchestrating international internal and external teams to build complete user journeys on integrated technologies and use-case development
- Motion Graphics Generation - Creation of refined contents for Demos in Munich
- Multi-purpose gesture-control for various infotainment interactions
- MINI APAC Innovation Car (MAIC): Dynamic projection UI/UX Concept Development, Distortion masking
- AR Head Up Display - Concept Development for Challenging Windshields

Artificial Intelligence

- Researching on domain specific LLM Benchmarking Methods and Evaluation strategies. Managing external university researchers and internal counterpart department.
- Master Thesis on Multimodal Affect-state recognition - Accepted to BMW Summer School 2025
- Concept Development on Embedded Edge-based Small Language Model

Dec 2023 – August 2024

@Founding Member Of AixSense

SensUs 2024 Startup Competition

- Developed real-time, continuous monitoring biosensor for kidney disease utilizing creatinine as biomarker
- Contributed as Data Scientist & Business Development
- 1st Place in Business Translation Award
- 2nd Place in Innovation Award
- <https://www.aixsense.de/>

Dec 2022 – June 2023

@Robert Bosch GmbH

Intern at Cross Domain Computing Solutions

Technical Project Management

- Contributed to the overall technical project management for the Collaboration between Bosch & Toyota Woven City ADAS tech stack development

Computer Vision Software Testing

- Testing & Validation of the CV modules (object detection, lane detection, etc.), dataset validation, quality check of the models