

Experience

Caterpillar Japan

Akashi, Japan

Research & Development Senior Engineer 2023-Present

System coordinator for the development of new software features on excavators

- Led software system architecture and overall UI design
- Defined and maintained UI design guidelines across machine features
- Led feature demonstration in customer events in both US and Japan
- Built hands-on prototypes to validate new feature concepts
- Developed next generation UI designs.

Engineer 2021-2023

UI/UX Design for autonomous excavator features

- Led development of a scalable UI design library in Figma
- Collaborated with US teams to build a standardized corporate icon library
- Designed and implemented automated menu generation using a standard component library, significantly improving development speed and accuracy
- Enhanced UI interactions, including event lists, dialogs, toast messages, and smooth menu scrolling
- Prototyping and user testing for voice control and UI sound improvements

Senior Associate Engineer 2019-2021

UI Design and graphic designs for cab touch display.

- Introduced a system-wide, WCAG-compliant color palette to improve consistency, readability, and color-blind accessibility
- Improved menu hierarchy through user testing

Cloud Ace

Tokyo, Japan

Global Marketing Department Part-time Sep.2018-Feb.2019

- Developed marketing websites
- Produced video content for the company's YouTube channel

Education

The University of Tokyo

Tokyo, Japan

Master of Science: Experimental Particle Physics 2016-2018

Performed large-scale experimental data analysis

Designed, calibrated, and simulated experimental apparatus

Peking University

Beijing, China

Bachelor of Physics 2012-2016

Researched PCB quality control modules for particle physics experiments

Skills

Technical

Vehicle software system design/development,
User research planning / facilitating / analyzing,
Data analyzing and visualization

Tools

Figma, Sketch, Adobe Photoshop, Adobe Illustrator, Final Cut Pro, Blender, Procreate, C/C++, SwiftUI, HTML, CSS, Javascript, Git, DevOps, Microsoft Office

Creative

Graphic User Interface design / detail rendering,
Human centered design Software System design,
Rapid prototyping,
Bitmap Illustration, Sketching/painting

Languages

English (TOFEL 109) Japanese (N1)
Chinese (Native)