

DER-SHUAN HWU (JESSICA)

User Experience Researcher | Design Strategist

SUMMARY

User-Centric Research Strategist: Blends industrial design with user research to solve complex hardware challenges and align technical specs with human needs.

Design-to-Production Bridge: Translates visionary concepts into mass-produced reality, preserving design fidelity from early research through the factory floor.

Holistic Experience Designer: Applies CMF and product-planning expertise to deliver functional, sustainable, and equitable solutions grounded in evidence-based insight.

KEY SKILLS

Research & Strategy: User Experience Design & Research, Consumer Product Design & Development, Prototyping & Testing, User Interviews, Synthesis & Analysis

Design & Tools: 3D Modeling (PTC Creo), Rendering (KeyShot), Design Thinking, Adobe CC (Photoshop, InDesign, Illustrator), Creative Sketching

PROFESSIONAL EXPERIENCE

SANYANG MOTOR CO., LTD. (SYM) – Taiwan's largest motorcycle manufacturer Taiwan

Product Planning/Design Researcher Sep 2023 – Present

Market & Consumer Insights

- Designed a framework to evaluate consumer interpretation of fuel metrics, uncovering a 50% comprehension gap and preventing an unnecessary NT\$1.4M annual cost increase by realigning technical specs with actual purchase drivers.
- Led end-to-end research – surveys and user interviews – to uncover unmet needs among mid-age female riders, translating findings into optimized storage and ergonomics for compact scooter designs.

Product & Brand Strategy

- Converted research insights into CMF recommendations for the “Grey Gold” launch, diversifying color distribution and establishing a high-value “outdoor adventure” identity that reduced reliance on standard black variants.

Cross-Functional Collaboration & Product Execution

- Bridged design, engineering, and manufacturing teams by translating user requirements into technical specifications.
- Balanced aesthetic styling with mass-production feasibility throughout the development cycle.

CMF & Factory Liaison

- Serve as the daily point of contact between design teams and manufacturing partners, translating CMF specifications into production-ready execution on the factory floor.
- Apply hands-on expertise in coatings and decal (sticker) materials to guide junior designers' CMF decisions, bridging design intent with manufacturing feasibility.
- Made a critical color-durability judgment call under launch-week pressure: when a 600-hour weathering test showed accelerated color degradation at the 400-hour checkpoint, assessed the degradation curve and the product's UV-protective cover to recommend proceeding – confirmed by final results, keeping the launch on schedule.
- Participate in pre-mass-production trial assembly to evaluate build quality and identify fit-and-finish issues; disassemble and reassemble shells during color/material selection to pinpoint appearance-related defects, documenting findings to guide designers and build an internal CMF knowledge base.

REDCROSS CANADA — NGO Toronto, Canada

Graphic Designer (Freelance) Dec 2022 – May 2023

- Developed branding guidelines and a visual communication system for a public health education campaign.
- Simplified complex health concepts into intuitive visuals to support campaign reach and audience comprehension.

NATIONAL CHENG KUNG UNIVERSITY, COLLEGE OF PLANNING & DESIGN *Tainan, Taiwan*

Project Coordinator Aug 2017 – Jul 2018

- Coordinated design education programs with faculty, students, and administrative teams, aligning project activities with academic objectives.
- Managed logistics and scheduling for international design workshops as the central point of contact.

TSANN KUEN MAGIC LAB CO., LTD. — One of Taiwan's largest consumer electronics manufacturers Taiwan

Industrial Designer Jan 2016 – Jul 2017

- Developed consumer appliance concepts from early sketches through final 3D rendering (PTC Creo, KeyShot), supporting client product development and enabling rapid design decision-making.

EDUCATION

OCAD UNIVERSITY Toronto, Canada

Master of Design, Design for Health 2020 – 2022

NATIONAL CHENG KUNG UNIVERSITY *Tainan, Taiwan*

Master of Science in Industrial Design 2016

NATIONAL KAOHSIUNG NORMAL UNIVERSITY *Kaohsiung, Taiwan*

Bachelor of Industrial Design 2012

ACHIEVEMENTS

Top 4 Award, Asian Development Bank Datathon 2021

Service Design & Sustainability Project | Smart Cities Datathon (Asian Development Bank)

- Researched Southeast Asian e-waste and digital inequality to design a P2P appliance-sharing platform that extended product lifecycles and improved tech access for low-income communities.
- Developed service architecture and wireframes for a circular rental platform; recognized as a Top 4 Finalist in the ADB Smart Cities Datathon.