

WINSTON HSU, Ph.D.

Technology Executive | Automotive AI & Robot Learning | Energy-SaaS & Edge Inference | 0-to-1 Builder

Taipei, Taiwan • whsu@ntu.edu.tw

winstonhsu.info • linkedin.com/in/winstonhsu • Google Scholar: NOvDH3QAAAAJ

EXECUTIVE SUMMARY

Technology executive with a rare combination of **C-suite industrial leadership**, **0-to-1 entrepreneurship**, and **world-class AI research** across three domains at the core of today's industrial-AI agenda: **automotive electronics & ADAS**, **energy & power-management SaaS**, and **industrial / Embodied AI**. Former CTO & VP of the Foxconn–Stellantis JV (MobileDrive), where I led a cross-border organization to deliver Taiwan's first ASIL-D certified ADAS and smart cockpit products into European and U.S. OEM markets.

Co-founder of two deep-tech ventures — **thingnario** (AI/IoT SaaS managing 5.5 GW of renewable-energy assets across 10+ countries; 2026 Taiwan Top-20 AI Company) and **ARDGE** (scalable Edge-AI inference system; CES 2026 TechRadar Pro Pick). Founding Director of the **NVIDIA AI Lab at NTU** — the first NVIDIA AI Lab in Asia, personally approved by NVIDIA CEO Jensen Huang.

Signature strength: translating early-stage research insight into defensible product strategy, technology roadmaps, and P&L-accountable execution. Recognized by Stanford / Elsevier as one of the **World's Top 2% Scientists (2023, 2024)**.

CORE LEADERSHIP IMPACT

- **Automotive / ADAS Delivery:** As CTO of the Foxconn–Stellantis JV, owned the technology P&L and delivered Taiwan's first ASIL-D-certified Level-2+ ADAS and smart-cockpit product into European and U.S. OEM programs.
- **Energy & Industrial SaaS at Scale:** Co-founded thingnario, now managing **5.5 GW** of solar / battery storage assets and processing **1.2 B data points / day** across 10+ countries, with >45% annual revenue growth (past 3 years).
- **Edge AI & Inference Economy:** Co-founded ARDGE to deliver scalable on-prem Edge-AI inference (HW + SW); CES 2026 TechRadar Pro Picks — addressing the post-training inference-economy shift directly relevant to industrial and automotive AI.
- **P&L, Board & Cross-Border Ops:** At MobileDrive, **owned full technology P&L and reported directly to the JV Board** (Foxconn × Stellantis executives); drove **product development, BD / sales, and competitive RFQ wins** against global Tier-1 suppliers; led multinational R&D across TW / CN/ EU.
- **Silicon & Platform Ecosystem:** Strategic / technical relationships with NVIDIA (Founding Director, first NVIDIA AI Lab in Asia), Qualcomm, Microsoft, MediaTek, Foxconn, Synology, QNAP, and HTC.
- **Strategic Foresight:** Made the early call on deep learning / GPU infrastructure (2013), robotics + LLM convergence (2024), and edge-inference economics (2025) — each commercialized ahead of local market.
- **Public Voice & Thought Leadership:** Long-running **DIGITIMES AI columnist** — recent series on "**The Inference Economy**" and "**Embodied AI / Robotics**," mapping to today's automotive, energy, and industrial-AI priorities; invited keynotes across major Taiwan AI forums.

PROFESSIONAL EXPERIENCE

Co-Founder & Strategic Advisor | **ARDGE (開端智能)**

Jul 2025 – Present

Edge-AI inference startup delivering the first scalable on-premise AI inference system (hardware + software) for enterprise deployment.

- **CES 2026 TechRadar Pro Picks Award** for flagship Edge-AI inference product.
- Defined product architecture and go-to-market strategy targeting the inference-economy shift post-training era.

Co-Founder & Board Advisor | **thingnario (慧景科技)**

2017 – Present

Global AI/IoT SaaS platform for renewable-energy generation, distribution, and battery-storage management.

- **Scale:** Manages **5.5 GW of solar capacity globally** (46% of Taiwan's solar plants); processes **1.2 billion data points daily** across 10+ countries.

- **Growth:** >45% annual revenue growth over the last 3 years; named **2026 Taiwan Top-20 AI Company** by Business Next.
- Architected the AI stack powering forecasting, anomaly detection, and O&M optimization for utility-grade customers.

CTO & Vice President | *MobileDrive (Foxconn × Stellantis JV)*

2021 – 2024

- **Full P&L ownership** of the technology organization for a cross-border automotive JV (Level-2+ ADAS, smart cockpit, AI-native HMI for global OEMs), with **direct reporting to the JV Board** composed of Foxconn and Stellantis executives.
- **Delivered Taiwan's first ASIL-D functional-safety-certified ADAS product**, penetrating European and U.S. automotive markets and meeting regional regulatory requirements (2024).
- **"Mapless" vision & end-to-end navigation** won a **competitive RFQ against major global Tier-1 suppliers** for an automotive AR-navigation program.
- **Led end-to-end product development and customer-facing BD / sales** with global OEMs and Tier-1s; owned technology roadmap, IP strategy, and silicon / Tier-1 partner selection; built and managed a multinational R&D team across Taiwan, China, and Europe.

Professor (Founding Director, NVIDIA AI Lab @ NTU) | *National Taiwan University*

2007 – Present

- Founded the **first NVIDIA AI Lab in Asia** (2016), directly approved and funded by NVIDIA CEO Jensen Huang; kicked off four years of flagship collaboration with NVIDIA R&D.
- Principal investigator on industry-collaborative programs with NVIDIA, Qualcomm, Microsoft, MediaTek, Foxconn, Synology, QNAP, and HTC.
- Advisor / strategic consultant to multiple Taiwanese ICT firms on AI product strategy and R&D organization.

Visiting Scientist | *Microsoft Research, Redmond / IBM T.J. Watson Research Center*

2014 / 2016–17

- At IBM Research, contributed to the **first-ever AI-generated movie trailer** (with 20th Century Fox, "Morgan"); recognized with the IBM Pat Goldberg Memorial Best Paper Award (2018).

Founding Engineer (#8) & R&D Manager | *CyberLink Corp. (訊連科技)*

Early career

- Core member of the founding engineering team of what is now a globally recognized, publicly listed multimedia software company.

RESEARCH LEADERSHIP & TECHNICAL CREDENTIALS

- **Research stature:** World's Top 2% Scientists (Stanford/Elsevier, 2023 & 2024); Google Scholar **13,400+ citations**, H-index 51, i10-index 125 (Apr 2026).
- **Robotics & embodied AI (2026 top-tier output):** open-vocabulary mobile manipulation at 85% success (**AAAI'26**); feasibility-aware vision-and-language navigation with false-premise detection (**VLN-NF, ACL'26**); commonsense planning under implicit affordance constraints (**ADAPT, ACL'26**); LLM-integrated robot policy (CoRL'24, ICLR'25).
- **3D vision & autonomous driving: MonoDTR** — depth-aware transformer for monocular 3D object detection, new SOTA on KITTI (**CVPR'22, 314+ citations**); Orbeez-SLAM — first instant high-density neural mapping system, **800× faster than NeRF baselines** (ICRA'23); sparsity-invariant 3D perception for AV (ICRA'25).
- **Awards:** IBM Research Pat Goldberg Memorial Best Paper Award (2018); **NSTC Future Tech Award × 5** (2018, 2020, 2021, 2024, 2025); NSTC Wu Ta-You Memorial Award.
- **National policy & professional service: Domain Convenor, "AI Core Technologies & Chips," NSTC ICT Grand Challenge (ICTGC) Program** — steering Taiwan's national AI-core-tech & silicon agenda; Associate Editor, IEEE TCSVT / TMM; TPC Co-Chair, ACM Multimedia Asia 2021, ACM ICMR 2016, IEEE ICME 2017.

EDUCATION

Ph.D., Electrical Engineering, Columbia University, New York, USA (2007)

M.S., Computer Science & Information Engineering, National Taiwan University, Taipei, Taiwan (1995)