Yiguo (Eirwyn) Zhang

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HIGHLIGHTS

- 10+ years of technical experience and 5 years in a leadership capacity to drive AI/ML architecture, enterprise software development, and strategic digital transformation initiatives.
- Led the full-cycle development and deployment of enterprise-ready AI solutions for prominent government and Fortune 500 clients and assets for rural economic development, cultural tourism, and urban revitalization projects.
- Ensured 100% on-time project completion and 95% operational uptime throughout the COVID-19 crisis by leading a digital transformation that integrated proactive risk mitigation with strategic change management.
- Cultivated a robust regional AI ecosystem by directing the successful SNHU AI Summit and serving as an organizational member for the MIT Decentralized AI Summit and a regional organizer for "AI in NH" 501(c)(3).
- MBA and a BS in Computer and Information Science, with knowledge continually advanced through ongoing studies in AI Engineering at the University of Pennsylvania and GenAI & LLMs at Carnegie Mellon University.

EXPERIENCE

Partner & Head of Research & Development — Chengdu, China
Chengdu Science & Art Culture Development Co., Ltd — *January 2023 – Present*

Venture-backed startup organizing impactful international cultural exchange events and delivering specialized engineering and technical consulting services in a thriving free trade zone.

- Pioneered AI 3D reconstruction (NeRF, 3DGS) and digital twins with GPU-accelerated systems and image and geometric data pipelines (960GB/s), reducing processing time by >100x and accelerating TTM by 80%.
- Led a cross-functional team of 50+ in the project lifecycle, resolving conflicts, processing feedback, and proactively communicating with stakeholders to greatly improve PMF and expand market presence.
- Established new consulting service line by providing expert guidance and high-performance engineering solutions, and data processing and storage architecture for projects in VR, video games, and film production.
- Cultivated a robust US-based AI ecosystem by applying a global perspective to community leadership in directing the SNHU AI Summit, serving as an organizational member for the MIT Decentralized AI Summit, overseeing the launch of NANDA, and driving grassroots adoption as organizer for the "AI in NH" 501(c)(3).

Program Director, AI Summit — Manchester, NH
Southern New Hampshire University — *February 2024 – May 2025*

Conference launched at one of the nation's largest non-profit universities with over 200,000 enrollments that partner with employers to deliver degree programs and help working adults advance their careers.

- Spearheaded a major AI conference for 400+ attendees, featuring 35 speakers and 25 sessions, elevating the university's profile for innovation and leadership in the AI community, achieving 90%+ attendee satisfaction.
- Architected an end-to-end data strategy, applying game theory and advanced analytics (predictive, prescriptive) to optimize programming, forecast attendance, and guide strategic decisions.
- Developed a holistic performance dashboard by synthesizing financial metrics with non-financial KPIs (e.g., speaker ratings, social engagement), providing stakeholders with a comprehensive view of event ROI.
- Forged strategic partnerships with Greater Manchester Chamber of Commerce and MA AI communities, securing the event's inclusion on the regional Event Calendar, expanding its reach across New England.
- Instituted a risk management framework to mitigate threats (e.g., low registration, speaker cancellations) while fostering a culture of continuous learning, enhancing the team's operational efficiency and capabilities.

Director of Digital Transformation & Software Solutions Chengdu, China
Chengdu Lanma Sight Decoration Art Engineering Co., Ltd *August 2019 – August 2023*

Partnering with prominent government and Fortune 500 clients to deliver transformative urban and cultural projects nationwide, creating landmark destinations with measurable social and economic value.

- Mitigated the work stoppage risk during the initial COVID-19 lockdown through rapid engineering and deploying a secure remote work infrastructure in under 48 hours to maintain over 99% operational uptime.
- Spearheaded firm-wide implementation of the SCRUM agile framework and the firm's first private version control system (Git) for high-value architectural files.
- Ensured 100% on-time project delivery during the transition to remote work, eliminated critical data corruption risks and reduced project rework by 15-20%, increased team commitment reliability (Say-Do Ratio) to over 90% and cut the average task Cycle Time by 40%.
- Reduced annual IT costs by over 25% through a full vendor audit and by designing and implementing a new workstation reference system that equipped 100% of staff with role-optimized hardware.

Technical Director & Simulation Specialist Various Locations
Contract/Freelance *January 2015 – July 2019*

Freelance Technical Director providing high-performance simulation, engineering, and technology solutions, working with clientele including major video game publishers, VFX and film project owners, and Formula 1 motorsports teams.

- Served as principal technical consultant to Tier-1 clients in gaming, VFX, and motorsports, defining technology strategy and translating high-level creative and engineering objectives to actionable roadmaps.
- Architected a proprietary C++ game engine for PC and console platforms, featuring a PBR pipeline that achieved photorealistic visuals at a sustained 120 FPS on AAA titles.
- Implemented real-time physics systems for multiple game titles; combining GPU & CPU-based C++ optimizations to enhance simulation stability, enabling rich gameplay experience with object interactivities.
- Increased player engagement by 25% in a flagship open-world RPG by engineering a dynamic AI system, leveraging game theory to drive sophisticated and adaptive NPC behavior in response to player actions.
- Pioneered GPU-accelerated CFD simulation for an F1 team by developing a novel solver (CUDA/OpenCL) with a leading CAE vendor, achieving a simulation speedup of >1500% to shorten R&D cycles.

EDUCATION

University of Pennsylvania Philadelphia, PA
Master of Science in Engineering (M.S.E) in Artificial Intelligence Ongoing
Carnegie Mellon University Pittsburgh, PA
Graduate Certificate, Generative AI and Large Language Models Ongoing
Southern New Hampshire University Manchester, NH
STEM MBA - Management Sciences & Quantitative Methods May 2025
Bachelor of Science, Computer and Information Sciences July 2022

SKILLS & CERTIFICATIONS

- **Technical:** Generative AI & LLMs | Machine Learning & Deep Learning | Programming (SQL, R, C++, MATLAB, Python) | HPC & GPU Acceleration (CUDA, OpenCL, OpenGL, Vulkan, DirectX, SYCL)
- **Business:** Digital Transformation | Technical Leadership | Strategic Partnerships | Negotiation | AI Entrepreneurship | Financial Accounting | Change Management | Stakeholder Engagement
- **Certifications:** Applied Data Science (MIT, 2024) | AI Product Management (Duke, 2024) | AI/ML in Financial Services (ELVTR, 2024) | AI Engineering (IBM, 2022)
- **Languages:** English, Mandarin Chinese (Fluent); Japanese, French, Italian (Intermediate)