

ONG WEN QING, Perry

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“Complex manufacturing challenges demand intelligent and adaptive solutions. Through my experience deploying deep learning systems and researching cutting-edge AI methods like LLM-based RAG, I’ve grown committed to solving these problems practically leading me to pursue a Master’s in Artificial Intelligence to deepen my ability to build smarter, data-driven manufacturing environments.”

TECHNICAL SKILLS & COMPETENCIES

Certifications: [Kubernetes and Cloud Native Essentials \(LFS250\)](#), [Machine Learning - Stanford University](#)

Computing Languages: C#, CSS, HTML, Javascript, LATEX, **Python**, Structured Query Language

Interests: Blockchain (Smart Contracts/NFTs), Cybersecurity, Large Language Model, Computer Vision, Time series Analysis

PROFESSIONAL WORK EXPERIENCE

Murata Electronics Singapore

Jun 2021 – Present

Software & Rationalization Engineer | Oct 2023 – Present

- Spearhead the digital transformation of Multi-Layer Ceramic Capacitors (MLCC) manufacturing by developing innovative software and hardware solutions to enhance process efficiency and quality
- Architect, train, and deploy in-house deep learning models (CNNs, YOLOv8) for high-precision defect detection and classification
- Design and build full-stack, real-time computer vision applications using *Python and React.js*, integrating model inference into production workflows
- Research and prototype cutting-edge Large Language Model (LLM) workflows—focusing on Graph RAG, Multi-Modal RAG, and Self-RAG—to enable intelligent knowledge management in smart factory environments

Process Engineer | Jun 2021 – Oct 2023

- Led process ownership of the *Sheet Coating* operation for Multi-Layer Ceramic Capacitors (MLCC)
- Ensured consistent *in-process quality control* and adherence to manufacturing specifications
- Championed *Lean Six Sigma* methodologies to streamline and improve process efficiency
- Designed and conducted *Design of Experiments (DOE)* for lot qualification and new product introduction

EDUCATION

Nanyang Technological University, Singapore

May 2025

Master of Science, Artificial Intelligence

- Specialized in advanced AI theories, methodologies, and applications for real-world problem-solving under both limited-data and big-data environments
- Completed core coursework in *Computer Vision, Natural Language Processing, Multi-Agent Systems, Reinforcement Learning, and Fundamentals of Machine Learning*

Nanyang Technological University, Singapore

June 2021

BEng (Bachelor of Engineering) in Material Science and Engineering with Distinction

- Specialized in Nanoscience and Nanotechnology, focusing on the development and application of materials at the nanoscale
- Completed hands-on research and lab work in materials characterization, thin film technology, and nano-fabrication techniques
- *SgIS Mid-Term Scholar*, awarded by the Singapore Government for academic excellence and leadership potential

PUBLICATIONS

- Yong-Zhi Lim, [Wen Qing Ong Perry](#), Jianying Zhou, “Towards Atomicity and Composability in Cross-Chain NFTs”. (DBSec’24), Lecture Notes in Computer Science 14901, Proceedings of 2024 IFIP Conference on Data and Applications Security and Privacy, San Jose, USA, July 2024, Springer: For checking and comparisons of >400k duplicate digital assets during bridging and transfer between siloed blockchains