Dion Yi CHIA

Mobile: +65 9466 5466 | Email: dionyichia@gmail.com | LinkedIn: https://www.linkedin.com/in/dionyichia

Education

Nanyang Technological University, Singapore   *Aug 2023 – Dec 2027*
Bachelor of Engineering Science and Master of Science (Technology Management), Expected Honours (Distinction)
- Renaissance Engineering Programme (Premier Engineering Scholars' Programme in NTU), specialisation in Computer Engineering
- Renaissance Engineering Programme Scholarship (REPS) recipient

Anderson Serangoon Junior College, Singapore   *Jan 2019 – Dec 2020*
Singapore-Cambridge General Certificate of Education Advanced Level | 90/90 Rank Points
- Academic Award for 6 Distinctions in the 2020 GCE A-Level Examinations
- Outstanding Contribution Award (2019 – 2020)

Work Experience

DSO National Laboratories, Singapore   *May 2025 – Aug 2025*
Algorithm Engineer Intern
- Researched partitional, hierarchical, and density-based clustering algorithms. Benchmarked K-Means, Mean-Shift, DBSCAN, and HDBSCAN for performance and accuracy.
- Parallelized open-source clustering algorithms in an offline Linux environment on a HIP-based GPU system, achieving a 10× speedup while preserving accuracy.

Land Transport Authority, Singapore   *Jun 2024 – Jul 2024*
Artificial Intelligence Intern, Data Science Department
- Researched on 4 branches of deep learning namely, Computer Vision, Natural Language Processing, Generative AI and Reinforcement Learning.
- Created documentation to distil technical concepts for clarity and understandability for a diverse audience.

Cosmose, Singapore   *Feb 2023 – Apr 2023*
Business Development Intern, KaiKai
- Developed tools to automate processes such as prospecting and mailing for CRM processes using JavaScript, resulting in substantial enhancement of team productivity.
- Covered end-to-end sales cycle of B2B products in a fast-growing tech-start-up. Surpassed targets set and acquired more than 50 leads through sales pitches.

Extracurriculars

REACH, Nanyang Technological University   *Jan 2024 – Present*
President
- Led a team of 30 in engineering innovative solutions targeted at the disadvantaged and differently abled, including projects in various fields such as MedTech.

Outdoor Activities Club, Anderson Serangoon Junior College   *Jan 2019 – Dec 2020*
Vice-President
- Led a team of 30 in coordinating various activities to promote outdoor survival skills and physical fitness. Coordinated a service-learning trip to Vietnam to bolster facilities at a local primary school.

Projects

Visual-Field Testing Booth – A system utilising computer vision and a pan-tilt servo mechanism used to enhance traditional VF analysis. *Awarded a $15,000 (SGD) grant by Tan Tock Seng Hospital for further development.*

Finder – An adaptive retrieval-augmented generation tool built using LangChain, Ollama and Milvus.

Inflatacare –Smart inflation device that assists everyday movement (e.g. sitting upright) and helps prevent bedsores amongst in elderly or bedridden patients through automated pressure monitoring and load rebalancing.

Skills & Interests

Skills: Problem Solving, Python, C, Java, React, HTML5, CSS, JavaScript, Git, and Verilog
Languages: English (Native), Chinese (Native)
Interests: Taekwondo (Varsity), Basketball, Outdoor Exploration, Electric Bass