Tze Yi (Ty) Tiong

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Education

University of Michigan, Ann Arbor   **Aug 2023 - Dec 2025**
B.S. in Computer Science (GPA: 3.7)
- **Relevant Courses:** Database Systems, Machine Learning, Statistics & Data Analysis, Web Systems, CyberSecurity

Skills

Programming & Analytics: Python (Pandas, PyTorch, Scikit-Learn), SQL, JavaScript (Chart.js, D3.js), C++
AI, Cloud & Tools: AWS (Lambda, S3, QuickSight), IBM WatsonX (ai, orchestrate, discovery), Microsoft Office, Canva
Languages: English (Fluent), Bahasa Melayu (Fluent), Chinese (Professional)

Work Experiences

IBM   **May 2025 - Aug 2025**
Solutions Architect Intern
- Led deployment of IBM Maximo AI-powered asset maintenance platform for energy client, delivering technical workshops addressing predictive model accuracy and industry compliance standards
- Co-led enablement sessions training 7 business partners on deployment strategies, creating training materials for workshops
- Resolved critical OpenShift installation failures through systematic troubleshooting in collaboration with IBM's global engineering team, directly saving a $95K/year renewal contract
- Evaluated and prototyped GenAI chatbot solution for healthcare client to improve response accuracy, conducting comparative analysis against existing system and delivering implementation recommendations
- Coordinated WatsonX Orchestrate (Agentic AI) challenge for Southeast Asia participants, managing logistics and demonstrating AI capabilities to 100+ attendees including high-level executives

Pantas Climate Solutions   **May 2024 - Aug 2024**
Software Engineer Intern
- Developed carbon emissions calculator for investment portfolios, creating technical documentation (architecture diagrams, PCAF-aligned data specifications) that supported sales team in closing deal with investment firm
- Built Python/Pandas data pipeline processing financial data from Bloomberg API and Excel file inputs, delivering 50% faster automated client reporting through AWS Lambda and QuickSight
- Designed SQL table schemas for 5 asset classes and optimized queries, improving client dashboard performance by 300ms

University of Michigan - Transportation Research Institute   **Dec 2024 - Mar 2025**
Software Engineer
- Modernized legacy query system improving researcher productivity and resolving data consistency issues through QA testing
- Built interactive data visualization dashboards analyzing 500K+ vehicle crash records for highway safety researchers, enabling data-driven policy recommendations

Interactive Sensing and Computing Lab   **Aug 2024 - Dec 2025**
Software Engineer (Research)
- Designed privacy-preserving audio sensing system for autoimmune disease research, achieving 75% activity classification accuracy through ML model (Hugging Face AST) optimization
- Built Python/NumPy data collection and processing infrastructure handling real-time audio streams on Orange Pi hardware
- Developed full-stack data annotation app enabling efficient labeling of training data across multiple sensors with secure authentication and HIPAA-compliant data handling

Opus Asset Management   **May 2023 - Aug 2023**
Software Engineer Intern
- Automated data extraction from 1,500+ PDFs/web sources via OCR and web scraping, increasing team productivity by 250%

Leadership Experiences

Michigan Hackers | iOS Project Lead   **June 2024 - Apr 2025**
- Led team of 8 developers building interview prep app with AI-powered recommendation system; managed sprints, conducted code reviews, and hosted weekly technical workshops

American Degree Transfer Program | Head of Activities   **Apr 2022 - June 2023**
- Organized Homecoming event for 250+ students/alumni, securing RM10,000+ in sponsorships and managing logistics, performer recruitment, and event day activities