Zhiyuan Yan

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Education

University of Rochester   Rochester, NY
Bachelor of Science, Computer Science   Anticipated May 2027
• GPA 3.7

Work Experience

Bilsea International Pte. Ltd   Singapore, SG
Data Analyst Intern   April 2023 - July 2023
• Analyzed 12 years of data in Google Sheets to identify key partners and assess their collaboration potential.
• Identified top three strategic partners to enhance decision-making in partnership management and future planning.
• Presented growth trends and insights to stakeholders using Flourish.studio and Google Charts in a 20-second video.

AITHENA   Singapore, SG
AI Engineer Intern   June 2025 - August 2025
• Built a legal knowledge graph system using Python, LlamaIndex, and Neo4j, with structured JSON extraction, schema validation, semantic search, and automated evaluation over Singapore case law.
• Integrated and benchmarked multiple LLM providers (GPT-4, Llama-405B, MockLLM), implementing cost controls, robust error handling, hallucination detection, and cross-model performance reporting.

AI & Data Science Projects

ImageR - AI Image Generation & Enhancement App | *SwiftUI, REST API, Stable Diffusion*
• Developed an iOS app using Stable Diffusion v3 for image generation and repair, featuring custom animations, and fast processing (1-second image generation)
• Designed a robust app architecture with seamless photo library integration, ensuring instant saves and real-time updates with efficient error handling

Relevant Coursework

Introduction to Artificial Intelligence (CSC 242) | *Python*
• Developed game-solving AI systems in Python, implementing AC3 with heuristic search for Sudoku and Minimax with Alpha-Beta Pruning for Mancala, achieving efficient decision-making and up to 70% faster runtimes.

Leadership & Activities

Singapore Students' Association   Rochester, NY
Co-Founder, Business Manager   January 2024 - Present
• Promoted events, overseeing logistics and food operations for an attendance that exceeded expectations by over 300%
• Managed budget and liaised with financial offices for efficient allocation of resources for cultural and social events

1st Commando Battalion   Singapore, SG
Corporal First Class   January 2021 - November 2022
• Led a company of 100 soldiers, ensuring smooth operations and logistics while maintaining peak combat readiness
• Received the "Best Soldier Award" from the Commanding Officer for exceptional leadership and performance

Skills

Programming Languages & Tools: Java, Python, C, Swift, HTML, CSS, PHP, SQL, Github, Docker, Cursor, Neo4j
Languages: American Sign Language (Intermediate), Mandarin (Conversational)