

GIA KHANH NGUYEN

Third Year Computer Science (Advanced) student at the University of Adelaide

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Education

The University of Adelaide

Bachelor of Computer Science (Honours)

Jan 2023 – Dec 2026

7.0/7.0 GPA - 94.3% WAM

Experience

Insightfactory.ai

AI Engineer

Jul 2024 – Present

Adelaide, SA

- Developing autonomous multi-agent systems to automate data migrations and engineering processes.
- Shipped Master Data Management software with innovative entity mapping algorithms, reducing manual verification workload by 83% (40 of 48 staff).

The Australian Institute of Machine Learning

Undergraduate Student Researcher

Jan 2025 – Present

Adelaide, SA

- Developing novel visual intelligence models that advance fine-grained, class-agnostic object counting capabilities.
- Collected and curated 200,000 images and videos of open-world dense object scenes for large-scale training.

University of California, Berkeley

Research Fellow

Jul 2024 – Nov 2024

Berkeley, CA

- Developed and evaluated machine learning models for carbon flux event detection (published at Nature Ecology).

Massachusetts Institute of Technology

Research Intern

Mar 2024 – Jul 2024

Adelaide, SA

- Enhanced the robustness of Stable Diffusion 3 by identifying and mitigating critical security vulnerabilities.

CREST

Summer Research Student

Nov 2023 – Feb 2024

Adelaide, SA

- Developed a novel framework leveraging LLMs, NLP, and RAG to automatically generate cyberattack metagraphs from CTIs, reducing human analysis time by 95%.

Maptek

Machine Learning Engineer Intern

Mar 2024 – Jun 2024

Glenside, SA

- Analyzed geological model performance and optimized neural networks for Jacobians extraction.
- Migrated models from TensorFlow to JAX, enabling parallel processing and boosting performance by 76%.

Budi

Lead Software Engineer

Oct 2023 – Jan 2024

Adelaide, SA

- Led a team of four in developing a logistics services marketplace platform.
- Built responsive landing pages, resulting in a 30% customer base growth.

Leadership / Extracurricular

President

The Society of Quantitative Analysis and Data

Apr 2023 – Present

The University of Adelaide

- Increased membership to become the second-largest CS club on campus within just 7 months of founding date.
- Effectively led and managed a 25-member committee, overseeing the dynamic operations of the thriving and influential club, the sole data society in South Australia.

Executive Committee

Competitive Programming Club

Oct 2023 – Present

The University of Adelaide

- Conceptualized and executed a high-impact hackathon event, drawing over 100 competitors.

Publications

Nguyen, Gia Khanh, Yifeng Huang, and Minh Hoai (2025).

Can Current AI Models Count What We Mean, Not What They See? A Benchmark and Systematic Evaluation.

In *Digital Image Computing: Techniques and Applications (DICTA)*.

References

Prof. Minh Hoai Nguyen — Professor, BBVisual Lab (AIML)

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Peter Inge — CEO, Insightfactory.ai

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