# KHANH NGUYEN

Second Year Computer Science (Advanced) student at the University of Adelaide 2 0403-804-711 hkanhgn.github.io

#### Education

The University of Adelaide

Jan 2023 – Dec 2025

Bachelor of Computer Science (Advanced)

 $7.0/7.0 \; GPA$ 

University High School

Jan 2021 - Dec 2022

Victorian Certificate of Education

99.05 ATAR

Experience

The Australian Institute of Machine Learning

Jul 2024 - Present

 $Student\ researcher \mid BBV is ual\ Lab$ 

Adelaide, SA

• Project: Machine Learning for fine-grained class-agnostic visual counting

Insightfactory.AI

Jul 2024 - Present

 $Under graduate\ Data\ Scientist$ 

Adelaide, SA

• Developing and enhancing Master Data Management (MDM) software.

Massachusetts Institute of Technology Living Lab

Mar 2024 - Present

Research Intern

Boston, MA

- Evaluated the effectiveness of different backdoor attacks on various diffusion models.
- Identified Vulnerabilities and Mitigation Strategies in State-of-the-Art Generative Models, Including Stable Diffusion 3.

### Maptek Pty Limited

Mar 2024 - Jun 2024

Machine Learning Engineer Intern

Glenside, SA

- Analysed the performance of geological models and developed strategies to enhance neural network efficiency especially for Jacobians extraction applications.
- Migrated the TensorFlow model to a JAX, enabling parallel training and inference and enhancing performance by 76%.

## University of Adelaide

Nov 2023 - Feb 2024

Summer Research Student | Supervised by Prof. Hung Nguyen

Adelaide, SA

• Pioneered the conceptualisation and development of an innovative framework, harnessing the power of LLMs, NLP and RAG and to automatically generate metagraphs for cyber attacks retrieved from CTIs.

Budi Oct 2023 – Jan 2024

Front-End Lead Adelaide, SA

• Supervised a team of 4 to redesign key platform components, resulting in a 30% increase in customer base.

### Leadership / Extracurricular

#### Amazon ML Summer School

Jan 2024 - Mar 2024

Amazon

President

APAC

• Selected as 1 of 100 students to join Amazon ML training program.

The Society of Quantitative Analysis and Data

Apr 2023 – Present The University of Adelaide

• Trailblazed the swift expansion of the club, propelling its membership to over 400 members within just 7 months of founding date, becoming the second-largest CS club on campus, surpassing many well-established counterparts.

#### Founder and President

May 2021 - December 2022

Programming Club

The University High School

- Founded and established the Coding Club in high school, drawing in a significant 130 students to actively participate.
- Initiated a positive domino effect within the school, leading to the establishment of various STEM-focused sub-branches, including robotics, game development and other computer science fields, under my guidance.

#### Executive Committee

Oct 2023 – Present

Competitive Programming Club

The University of Adelaide

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

# **Technical Skills**

Languages: C++, Python, Matlab, HTML/CSS, JavaScript, R

Technologies/Frameworks: FLAX/JAX, PyTorch, HuggingFace, ReactJS, MongoDB, GitHub