

Vy Dinh (Ms.)

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EDUCATION

Singapore University of Technology and Design (SUTD) <ul style="list-style-type: none">◦ Merit Scholar, Bachelor of Engineering	Sept '21 - present <i>Singapore</i>
Hwa Chong Institution (HCI) <ul style="list-style-type: none">◦ A*STAR Scholar, Cambridge 'Advanced' ('A') Level	Jan '19 - Nov '20 <i>Singapore</i>
Singapore Chinese Girls' School (SCGS) <ul style="list-style-type: none">◦ A*STAR Scholar, Cambridge 'O' Level	Oct '16 - Nov '18 <i>Singapore</i>

SELECT HONORS AND AWARDS

Hwa Chong Diploma with Distinction , <i>Hwa Chong Institution</i>	2019 & 2020
High Distinction , <i>Australian Mathematics Competition</i> (Senior)	
1st Prize , <i>2nd International Artificial Intelligence Fair</i> , by Global AI Academic Alliance (MIT, Tsinghua University and 14 other esteemed institutions)	
Gold Award , <i>Singapore Science & Engineering Fair</i> , by Ministry of Education, A*STAR	
Research & Innovation Award (Healthcare) , <i>Singapore University of Technology and Design</i>	

EXTRACURRICULAR ACTIVITIES

SUTD Undergraduate Research Opportunities Programme <i>Team Member</i>	Sept '21 - present <i>Singapore</i>
<ul style="list-style-type: none">◦ Work in a team of 3 to research dimensionality reduction techniques for data pre-processing, with special emphasis on linear discriminant analysis (LDA)◦ Test the effect of random projections on various datasets	

HADTech JSC	Dec '20 - Oct '21
Team Leader of AI for the Personalized Learning Platform (EduNet)	<i>Vietnam</i>
<ul style="list-style-type: none">◦ Contributed to the software development process, including but not limited to product concept brainstorming, microservice architecture design, sequence diagram generation, and UI/UX design.◦ Directed a team of five in preliminary market analysis, construction of Python-based backend services (entry assessment algorithms, course and resource recommendation algorithms, and automatic math-problem-solver engines), development of APIs using the NestJS framework, and integration with frontend.	
Member of Front-end for the Personalized Learning Platform (EduNet)	
<ul style="list-style-type: none">◦ Coded part of the UI using React.	

COVID-19 Interactive Health Screening Tool	Apr '20 - May '20
Lead Programmer	<i>Singapore</i>
<ul style="list-style-type: none">◦ Wrote an interactive platform for users to generate custom COVID-specific questionnaires in Javascript using Google's API and an open source translations database◦ Platform allows medical practitioners to interview foreign migrant workers (population in Singapore: 1.4 million) regarding COVID exposure, symptoms, and treatment in 34 native languages besides English for quicker diagnosis and treatment turnaround	

Agency of Science, Technology & Research (A*STAR) Singapore	Apr '19 - Jun '20
Researcher, Bioinformatics Institute	<i>Singapore</i>
Project I: Automated Deep Learning of Angiography Video Sequences for Coronary Artery Disease	
<ul style="list-style-type: none">◦ Worked in the Imaging Informatics division to build an end-to-end stenosis analysis software in 2D fluoroscopy scans using both machine learning and non-data-driven techniques for use by the National Heart Centre	

- Research won **Gold** at the Singapore Science & Engineering Fair, **Research & Innovation Award (Healthcare)** by SUTD, and **1st Prize** at the 2nd International AI Fair in Beijing
- [Available on arXiv](#)

Project II: Prevention of Malicious Attack on AI Systems using Generative Adversarial Networks

- Investigated fundamental workings of adversarial attacks; tested different defenses including adversarial training with limited data and applying FenceGAN to filter out adversarial images

HCI MindSports

Feb '19 - Jun '20

Vice Chief Arbiter, FIDE Games; International Chess Div. Player Singapore, Vietnam

- Represented school in national chess competitions during game season; facilitated trainings, team welfare events, and recruitment efforts
- Personal achievements include: **1st Runner-up**, *71st Singapore National Individual Chess Championships*, 'A' Division Girls; **1st Place**, *60th Singapore National Inter-School Team Chess Championships*, Girls' Open
- Selected to serve as Vice Chief Arbiter to the 2019 U2000 games sanctioned by the World Chess Federation (FIDE) in Vietnam

SKILLS & INTERESTS

<i>Programming Languages</i>	Python Javascript C++ Matlab Pascal HTML & CSS
<i>Frameworks</i>	NestJS React Django
<i>Data Analysis & Research</i>	Machine Learning Computer Vision / Image Processing Statistical Computation Deep Learning Libraries LaTeX
<i>Competitive Programming</i>	Knowledge of hash, linked list, vectors & other data structures
<i>Other Projects</i>	<i>App translator</i> , Insomnia - Chng mt ng (Google Play , App Store) <i>Participant</i> , Microbform Game - Mindfulhacks 2021 <i>Participant</i> , Cyberthon 2020
<i>Other Interests</i>	Writing (Veiled Storm) Climbing Cycling Coffee making