

Tuan Dung Lai

3/530 Tooronga Rd, Hawthorn East, VIC 3123, Melbourne, Australia
tuandunglai@gmail.com • (+61) 413 727 184

EDUCATION

Swinburne University of Technology, Hawthorn, Melbourne, Australia

- Bachelor of Computer Science with Mathematics minor Feb 2017 – Jun 2020
 - GPA: 3.7/4.0 ([Transcript](#))
 - Leader of Swinburne team in competitive programming contest ACM/ICPC ([Certificate](#))

PERSONAL PROJECTS

- **Machine Learning Blog (Web)** ([Link](#)) Feb 2017 – now
 - Analyzes machine learning algorithms from mathematical perspective then visualize and implement them from scratch in python
- **AI for Flappy-Bird Game (Python)** ([Report](#)) ([Code](#)) Aug 2017 – Sep 2017
 - Develops a bot that can learn to Flappy-Bird Game over time
 - Uses Python, PyGame, Neural Network Model, Genetic Algorithm
- **Interactive data visualization (Web)** ([Link](#)) Mar 2018 – May 2018
 - Creates web-based interactive visualization to explore large data set
 - Uses D3 javascript library
- **Planetary Rover Game (C#, Winform)** ([Link](#)) Jun 2017 – Aug 2017
 - Develops a desktop game that allows player to control 2 rovers and play around with different devices in a 20x20 simulated area
 - Uses C#, Winform, object-oriented principles, design patterns
- **K-Means Visualization, Image Compression tool (Pascal)** ([Report](#)) ([Code](#)) Apr 2017 – Jun 2017
 - Helps students understand K-Means Algorithm faster by letting them visualize the process with their customized input followed by an application to reduce image file size and segment colors.
 - Contains 1300 lines of Pascal Code

AWARDS & SCHOLARSHIPS

- **Highest achieving student in introduction to programming unit prize** 2018
 - Provider: Integrated Application Development Pty Ltd
- **Swinburne international excellence scholarship – 4 year undergraduate** 2016
 - Provider: Swinburne University of Technology, Melbourne, Australia
- **National key program of mathematics development scholarship in period 2010-2020** 2014
 - Provider: Minister of Education and Training (MOET) of Vietnam ([Certificate](#))

EMPLOYMENT

- **Tutor - Swinburne University of Technology** Jul 2018 – now
 - Unit code: COS10009 - Introduction to programming
 - Conducts a class of 20-25 undergrads, explains concepts, provides feedback and marks their work.
- **Sessional Academic - Swinburne University of Technology** Feb 2018 – now
 - Unit code: COS10009 - Introduction to programming
 - Assists students with the entry level programming unit which uses C and Pascal language.
- **Research internship - Swinburne University of Technology** Nov 2017 – Apr 2018
 - Develops cross-platform application with voice-based user interaction, motion-compensated sound playback and 3D surround sound technology.
 - Uses Javascript, Java, Max/MSP, GoogleVR API, Google Speech API and audio processing tools.
 - Supervisor: [Dr. Chris McCarthy](#)

LINKS

- **Github:** github.com/DungLai
- **Linkedin:** linkedin.com/in/tuandunglai
- **Website:** dunglai.github.io

[CV compiled on 2018-08-13]