

# Dung Lai

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## EDUCATION

**Swinburne University of Technology**, Hawthorn, Melbourne, Australia

- Bachelor of Computer Science Feb 2017 – Jun 2020
  - GPA: 3.8/4.0 ([Transcript](#))
  - Leader of Swinburne team in competitive programming contest ACM/ICPC

## PROJECTS

- **Machine Learning Blog (Web)** ([Link](#)) Feb 2017 – now
  - Contains in-depth technical blogs on various machine learning algorithms from mathematical perspective, their applications with report and source code
  - Uses HTML5, CSS, Jekyll Markdown, Github and other technologies integration
- **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.
- **Planetary Rover Game (C#, Winform)** ([Link](#)) Aug 2017 – Sep 2017
  - Develops a desktop game that allow player to control 2 rovers and play around with different devices in a 20x20 simulated area.
  - Uses C#, Winform, make uses of object oriented principles, design patterns.
- **K-Means Visualization, Image Compression tool (Pascal)** ([Report](#)) ([Code](#)) Aug 2017 – Sep 2017
  - Help 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

- **Swinburne international excellence scholarship – 4 year undergraduate** 2016
  - Provider: Swinburne University of Technology, Melbourne, Australia
  - Value: \$24,000 (AUD)
- **National key program of mathematics development scholarship in period 2010-2020** 2014
  - Provider: Minister of Education and Training (MOET) of Vietnam ([Certificate](#))
  - Value: \$1,000 (AUD) and special mathematics training.

## EMPLOYMENT

- **Software Developer (Full-time summer intern)** Feb 2017 – now
  - Swinburne University of Technology, Melbourne, Australia
  - Project title: An immersive journey preparation tool for people with vision impairment.
  - I will be developing an auditory-based simulator to simulate the sensory experience of a specific location in Melbourne's CBD as a navigation training aid for the visually impaired for the City of Melbourne Project to improve accessibility.
  - Project investigator: [Dr. Denny Meyer](#). Advisor: [Dr. Chris McCarthy](#)
  - Technology: Unity, C#, Android, FMOD, Autodesk 3ds max.
- **Barista (Part-time)** Dec 2017 – Mar 2018
  - Excelled within service-oriented positions (concurrent with college studies), delivering premium customer service and attracting repeat customers.

## PROGRAMMING LANGUAGES

- Flexible switching and learning different languages depends on the problem.
- **Familiar:** Python, C#, C, Matlab, SQL, JavaScript, HTML/CSS.

## LINKS

- **Github:** [github.com/DungLai](https://github.com/DungLai)
- **Linkedin:** [linkedin.com/in/tuandunglai](https://linkedin.com/in/tuandunglai)
- **Website:** [dunglai.github.io](https://dunglai.github.io)

[CV compiled on 3rd December 2017]