# **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 (Certificate)

#### **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)

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, make uses of object-oriented principles, design patterns
- K-Means Visualization, Image Compression tool (Pascal) (Report) (Code) Apr 2017 Jun 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

2014

- Provider: Swinburne University of Technology, Melbourne, Australia
- Value: \$24,000 (AUD)

### National key program of mathematics development scholarship in period 2010-2020

- 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)

Dec 2017 - Mar 2018

- 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)

Feb 2017 – now

• 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, PHP

LINKS

• Github: github.com/DungLai

Linkedin: linkedin.com/in/tuandunglai

• Website: dunglai.github.io

[CV compiled on 3rd December 2017]