Dung Lai

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EDUCATION

Swinburne University of Technology, Hawthorn, Melbourne, Australia

- Bachelor of Computer Science — Feb 2017 – Jun 2020
  - GPA: 3.9/4.0 (Transcript)
  - Leader of Swinburne team in competitive programming contest ACM/ICPC (Certificate)

PERSONAL PROJECTS

- **Machine Learning Blog (Web)** (Link) — Feb 2017 – now
  - Analyze 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
- **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
  - 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

- **Swinburne - Summer research intern** (Website) — Nov 2017 – Feb 2018
  - Project title: An immersive journey preparation tool for people with vision impairment
  - Develops 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. Supervisor: Dr. Chris McCarthy
  - Uses Max MSP for signal processing to produce Ambisonics 3D sound and integrate external head tracker.
- **Barista** — Feb 2017 – now
  - Excelled within service-oriented positions (concurrent with college studies), delivering premium customer service and attracting repeat customers

PROGRAMMING LANGUAGES

- **Familiar**: Python (Numpy, Scikit-learn, Matplotlib)
- **Proficiency**: C# (.NET), C, Matlab, SQL, HTML/CSS, JavaScript, HTML/CSS, PHP

LINKS

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

[*CV compiled on 2018-02-18*]