Tuan Dung Lai

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EDUCATION

Swinburne University of Technology, Hawthorn, Melbourne, Australia

- Bachelor of Computer Science with Mathematics minor   Feb 2017 – Jun 2020
  - GPA: 3.6/4.0 (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

- **Software Engineer - Deakin Software and Technology Innovation Lab**   Nov 2018 – now
  - Develops a virtual receptionist application that applies face detection and recognition algorithm.
  - Uses C#, unity, python, flask, docker.
- **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.
- **Programming Assistant - Swinburne University of Technology**   Feb 2018 – now
  - 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

LINKS

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

[*CV compiled on 2019-02-27*]