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Nationality: Malaysian, UK Dependent Leave to Remain (Work permitted)

## REUBEN D. C. NG

### EDUCATION

#### UNIVERSITY OF SOUTHAMPTON

MEng Electronic Engineering with Artificial Intelligence

[September 2014 – June 2018]

Third Year

- Machine Learning: 74, Engineering Management and Law: 75, Computer Vision, Computational Biology, Computer Graphic

Second Year

- Electronic Design: 77, Devices: 77, Maths for EEE II

First Year

- Programming: 71, Electronic Circuits: 73, Digital Systems and Microprocessors: 72

### PROJECT EXPERIENCE

#### PLAYING VIDEO GAMES WITH REINFORCEMENT LEARNING

[November 2016 – present]

Training agents to play classic video games using only raw pixel values as input with convolutional neural network and deep reinforcement learning. Applying agents onto different games with minimal adjustments of learning algorithms and hyperparameters.

#### WEB CONTROLLED ROLLING ROBOT DESIGN EXERCISE SPONSORED BY BAE SYSTEMS

##### Prize Winner

[March 2016]

Robot movement controlled gyroscopically via a webpage GUI. Camera, temperature sensor, accelerometer, light sensor, buzzer and motors connected with IoT framework WebIOPi on Raspberry Pi. Live sensor feedbacks and first person video feed streamed on to the GUI.

#### IBM'S MASTER THE MAINFRAME CONTEST 2015

##### Part 2 Prize Winner

[November 2015]

Programming and debugging mainframe programs.

### SKILLS

- C, C++, Java, MATLAB, Python, LaTeX
- OpenIMAJ (Computer Vision Libraries), OpenGL, OpenAI Gym (Reinforcement Learning Toolkit)
- SystemVerilog (Hardware Description Language)

Native/Bilingual Proficiency

- English, Mandarin Chinese, Cantonese

Working Proficiency

- Malay, Japanese