

REUBEN D. C. NG

EDUCATION

UNIVERSITY OF SOUTHAMPTON

MEng Electronic Engineering with Artificial Intelligence
[September 2014 – July 2018]

Fourth Year

- Advanced Machine Learning, Computational Finance, Data Mining, Intelligent Agents: 71, Evolution of Complexity: 71

Third Year

- Machine Learning: 74, Engineering Management and Law: 75, Computer Vision, Computational Biology: 82, Computer Graphic: 78

PROJECT EXPERIENCE

SENTIMENT ANALYSIS ON CRYPTOCURRENCY

[February 2018 – present]

Group project leader. Use twitter sentiment to predict price movement of cryptocurrency with different deep neural network architectures.

SMART CONTRACT PROJECT

[February 2018 – present]

Group project leader. Deploy smart contract onto the Ethereum blockchain.

SECURE PING BY BAE SYSTEMS

[October 2017 – April 2018]

Final year group project. Secured ethernet devices to identify secret network. Prototype has preliminary approval for use at a BAE Systems facility.

SECONDARY PROTEIN STRUCTURE PREDICTION

[March 2017 – May 2017]

Predict secondary protein structure with deep neural network.

PLAYING VIDEO GAMES WITH DEEP REINFORCEMENT LEARNING

[November 2016 – May 2017]

Third year individual project. Play video games using raw pixel values as input with deep reinforcement learning. Trained agents were able to achieve superhuman performance.

IOT ROLLING ROBOT PROJECT 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.

SKILLS

- Python, C, C++, Java, MATLAB, LaTeX
- TensorFlow & Keras (Deep Learning Library), OpenIMAJ (Computer Vision Library)
- SystemVerilog (Hardware Description), Solidity (Smart Contract)
- Languages: English, Mandarin Chinese, Cantonese, Malay