

Christopher Goh Zhen Fung

COMPUTER SCIENCE · MACHINE LEARNING · CYBERSECURITY

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Education

National University of Singapore

BACHELOR OF COMPUTING (HONOURS), COMPUTER SCIENCE

Singapore

Aug. 2019 - 2023

- Commenced undergraduate studies at School of Computing, NUS in August 2019.

River Valley High School

GCE A' LEVELS, INTEGRATED PROGRAMME

Singapore

2010 - 2016

- 2 H1 Subjects: General Paper, Project Work
- 4 H2 Subjects: Mathematics, Physics, Chemistry, Economics
- Total University Admission Score: 85/90

Other Qualifications

1. Deep Learning Developer — awarded by SGInnovate & Red Dragon AI
2. Data Science Introduction (Python) — awarded by UpCode Academy

Experience

DSO National Laboratories

MACHINE LEARNING INTERN (NATURAL LANGUAGE PROCESSING)

Singapore

Apr. 2019 - Aug. 2019

- Training and fine-tuning of state-of-the-art neuronal natural language processing models for named entity recognition tasks.

Singapore Army

PROJECT CLERK, LEADERSHIP BRANCH, HQ TRAINING & DOCTRINE COMMAND

Singapore

Mar. 2017 - Jan. 2019

- Awarded the 2018 Army Full-time National Serviceman of the Year Award, Commander TRADOC Coin, Commander ALTI Letter of Appreciation, Commanding Officer 1st Commando Battalion Coin, Platoon Best Recruit.
- Produced LEARNet Video Courseware for junior commanders' leadership training.
- Designed and ran several pinnacle Army command courses for Commanding Officers and Brigade Commanders.
- Organised formation anniversary event as Head of Logistics and Chairman in 2017 and 2018 respectively.
- Conceptualised the Leader Strong Campaign – an initiative to strengthen leadership development efforts across the Army.
- Motivational Speaker for new SAF recruits at BMTC School V.

DSO National Laboratories

PART-TIME RESEARCH STUDENT (ARTIFICIAL INTELLIGENCE)

Singapore

Jul. 2015 - Apr. 2016

- Developed a Context Aware Web-mining Engine which used Natural Language Processing techniques to extract key features of input documents, fetch highly-similar documents, and perform data fusion & visualisation for counter-terrorism profiling & disaster monitoring.
- Presented and published research paper "Context Aware Web-mining Engine" in the IRC-SET Science Conference 2016.
- Awarded a Bronze award at the Singapore Science & Engineering Fair 2016.

Nanyang Technological University (School of Humanities & Social Sciences)

PART-TIME RESEARCH STUDENT (COGNITIVE SCIENCE / SOFTWARE ENGINEERING)

Singapore

May. 2015 - Apr. 2016

- Created a front-end browser-based JavaScript game to measure human reaction times in cognitive tasks, a backend NodeJS server for data collection, and analysed collected data with R.
- Received a Silver Award at the NRP Symposium 2016 for research paper "Creating Online Computer Games for Cognitive Training".

DSO National Laboratories

PART-TIME RESEARCH STUDENT (CRYPTOGRAPHY)

Singapore

Jul. 2014 - Apr. 2015

- Cryptanalysed the Crypto1 cipher and explored different factors which could affect the speed of algebraic cryptanalysis.
- Finalist at the Singapore Science & Engineering Fair 2015.

Publications & Research Work

1. Christopher GOH and KOAY Tze Min. Context Aware Web-mining Engine. IRC Conference on Science, Engineering and Technology (IRC-SET), May 2016. Retrieved from http://ircset.org/anand/2016papers/IRC-SET_2016_paper_S5-4.pdf.
2. Christopher GOH, Jasmine LIEW and Melodies SIM. Cryptanalyzing the Crypto1 Cipher. (2015, January 5). Retrieved from <https://chrisgzf.github.io/reports/Crypto1.pdf>.
3. Christopher GOH. Creating Online Computer Games for Cognitive Training. (2016, April 5). Retrieved from <https://chrisgzf.github.io/reports/CognitiveTraining.pdf>.

Extracurricular Activity

River Valley High School - Infocomm Club

Singapore

CLUB PRESIDENT

2010 - 2016

- Led a club of over 40 members in robotics, programming and multimedia competitions.
- Club clinched multiple consecutive national championships and represented Singapore in several international tournaments.
- Organised robotics competitions to inculcate technical literacy and interest in primary and secondary school students.

Gen-R

Singapore

FOUNDING MEMBER & DIRECTOR OF PROGRAMMES

Jan. 2014 - PRESENT

- Founded non-profit society to develop youths in leadership, volunteerism and philanthropy through community outreach programmes, and increase IT literacy in the community.
- Organise tech competitions / workshops / hackathons for students and charity organisations. Events include the Singapore Tech Challenge, Singapore Makers' Challenge, Robotics Workshop for members of SPD Singapore (previously 'Society for the Physically Disabled').

Boon Lay Community Centre

Singapore

HEAD OF PUBLICITY - BOON LAY COUNTDOWN 2015 & 2016

Oct. 2014 - Jan. 2016

- Worked with Grassroots leaders in organising the annual heartland new year countdown event, attended by over 30000 Boon Lay residents.
- Led a team of 10 in designing all marketing collateral and multimedia displays.

River Valley High School - Y.LEAD Seminar 2015

Singapore

VICE-CHAIRPERSON OF PUBLICATIONS COMMITTEE

Jan. 2015 - Jul. 2015

- Led 20 members in the publicity operations of a week-long international youth leaders summit.
- Set up event domain and WordPress CMS functionality for online publicity.

Skills

Proficient C, Python, Java, HTML, CSS

Exposure C++, JavaScript, R, LaTeX

Software and Frameworks GNU/Linux, Git, Vim, PyTorch, TensorFlow, Keras

Fields of Interest Machine Learning, Data Science, Cybersecurity, Information Assurance

Languages English (Proficient), Chinese (Proficient)

Honours & Awards

INTERNATIONAL

2015 **Best Research Award 3rd**, FIRST Lego League World Festival 2015

St. Louis, MO, U.S.A

2009 **Global Top 6**, World Robot Olympiad 2009

Pohang, S. Korea

2007 **World Championship**, FIRST Lego League World Festival 2007

Atlanta, GA, U.S.A

DOMESTIC

2015 **Edusave Character Award**, Ministry of Education

Singapore

2015 **Daisy Phay Foundation Award**, Ministry of Education

Singapore

2015 **Bronze Award**, National Olympiad in Informatics 2015

Singapore

2015 **Championship & Best Programming Award 1st**, FIRST Lego League Singapore 2015

Singapore

2014 **Bronze Award**, National Olympiad in Informatics 2014

Singapore

2014 **Best Robot Performance Award 1st**, FIRST Lego League Singapore 2014

Singapore

2013 **Best Strategy Award 3rd**, National Junior Robotics Competition 2013

Singapore

2013 **Best Programming Award 1st**, FIRST Lego League Singapore 2013

Singapore

2012 **Best Research Award 2nd**, National Junior Robotics Competition 2012

Singapore

2012 **Certificate of High Distinction**, Rio Tinto Big Science Competition 2012

Singapore

2012 **Certificate of Distinction**, Australia Mathematics Competition 2012

Singapore

2012 **Certificate of Distinction**, UNSW International Competitions & Assessments for Schools (Science) 2012

Singapore

2011 **Best Programming Award 2nd**, **Best Presentation Award 3rd**, National Junior Robotics Competition 2011

Singapore