# Christopher **Goh**

COMPUTER SCIENCE · MACHINE LEARNING

✉ chrisgzf@gmail.com | ⬛ chrisgzf | in chrisgzf

## **Edu**cation

### River Valley High School                                                                                       *Singapore*

GCE A' LEVELS, INTEGRATED PROGRAMME                                                                *2010 - 2016*

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

## **Exp**erience

### Singapore Army                                                                                                   *Singapore*

PROJECT CLERK, LEADERSHIP BRANCH, HQ TRAINING & DOCTRINE COMMAND                      *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                                                                                   *Singapore*

PART-TIME RESEARCH STUDENT (ARTIFICIAL INTELLIGENCE)                                            *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.
- Presented to senior management at DSO National Laboratories and at YDSP Congress 2016.

### Nanyang Technological University (School of Humanities & Social Sciences)                     *Singapore*

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

PART-TIME RESEARCH STUDENT (CRYPTOGRAPHY)                                                          *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.

## **Pub**lications & 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*

C̲ʟᴜʙ P̲ʀᴇѕɪᴅᴇɴᴛ *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*

F̲ᴏᴜɴᴅɪɴɢ M̲ᴇᴍʙᴇʀ & D̲ɪʀᴇᴄᴛᴏʀ ᴏꜰ P̲ʀᴏɢʀᴀᴍᴍᴇѕ *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*

H̲ᴇᴀᴅ ᴏꜰ P̲ᴜʙʟɪᴄɪᴛʏ - B̲ᴏᴏɴ L̲ᴀʏ C̲ᴏᴜɴᴛᴅᴏᴡɴ 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*

V̲ɪᴄᴇ-C̲ʜᴀɪʀᴘᴇʀѕᴏɴ ᴏꜰ P̲ᴜʙʟɪᴄᴀᴛɪᴏɴѕ C̲ᴏᴍᴍɪᴛᴛᴇᴇ *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** | Linux, Git, Vim, JetBrains Suite, Visual Studio, TensorFlow |
| **Fields of Interest** | Machine Learning, Data Science |
| **Languages** | English (Proficient), Chinese (Proficient) |

# Honors & Awards

### I̲ɴᴛᴇʀɴᴀᴛɪᴏɴᴀʟ

| | | |
|---|---|---:|
| 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* |

### D̲ᴏᴍᴇѕᴛɪᴄ

| | | |
|---|---|---:|
| 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* |