

# SIM YU HUI, KELLIE



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## SUMMARY

Self-motivated and conscientious learner. Good team player with strong verbal and written communication skills, as well as excellent listening and interpreting abilities. Excellent interpersonal skills with demonstrable ability to solve problems and remain results focused in a fast changing environment. Possess experience in MS Office. Currently pursuing 4 online courses related to data science with Python and Excel. Did a project involving depression detection using speech analysis.

## SKILLS

Technical: Milling, Turning, Sheet Metal Work, Electrical & Electronic Measurement and Test Instrumentation, Breadboard Fabrication and Testing, Microcontroller Programming and Interfacing, Printed Circuit Board Fabrication, Wiring, Assembly and Testing

Software: MS Office, AutoCAD, Tina10, Adobe Photoshop, iMovie, Android Studio

Programming: C, C#, C++ , Java (intermediate), Python, HTML, Arduino, JavaScript, CSS (basic)

Languages: English (native), Chinese (fluent), Hokkien (basic)

Others: Swimming (up till SwimSafer Bronze), First Aid Certified

## EDUCATION

- Apr 2017 - **Ngee Ann Polytechnic**  
May 2020 Diploma in Engineering Science
- Cumulative GPA: 3.94
  - 4 Module Prizes, 12 Distinctions, 1 Pass with Merit, 3 Additional Certificates
- Jan 2013 - **School of Science and Technology, Singapore**  
Dec 2016 Singapore-Cambridge GCE 'O' Level Certificate
- L1R5: 8 points (raw), 6 points (net)
  - ELR2B2: 6 points (raw), 4 points (net)

## WORK EXPERIENCE

- May 2019 - **A\*STAR – Institute for Infocomm Research (I2R)**  
Oct 2019 Research Attachment, Deep Learning in Healthcare
- Developed a web application to enable evaluations of novel language technologies for improving workflow efficiencies in a hospital telehealth setting
- Dec 2017 **Pacific Bookstores Pte Ltd**  
Assistant Bookkeeper
- Handled customer service and books inventory

## CO-CURRICULAR ACTIVITIES AND COMMUNITY SERVICE

- Ngee Ann Polytechnic (NP)**
- Jan 2019 - FoodAID Club (Student Advisor)  
Jan 2020
- Advised and guided new main committee
- Apr 2018 - Engineering Science Academic Club (President)  
Apr 2019
- Led the club in organising events for ES students and also events in collaboration with SOE Society
  - Created and implemented club mission and vision
- Jan 2018 - FoodAID Club (Events Coordinator)  
Jan 2019
- Worked with charity organisations to organise events for all NP students
  - Coordinated volunteers during events
- Jun 2017 - FoodAID Club (Subcommittee Member)  
Jan 2018
- Organised a sushi making workshop with Jamiyah Children's Home and ice-cream making workshop
- May 2017 - Engineering Science Society (Subcommittee Member)  
Apr 2018
- Planned and executed events such as Movie Night and Bowling Day for ES students
  - Took detailed minutes for meetings
- May 2017 - Ngee Ann Poly - Institute of Engineers Chapter (Secretary)  
May 2018
- Took detailed minutes for meetings
  - Organised a bonding day cum recruitment event
- Aug 2017 - The Christieara Programme  
Feb 2020
- Took part in a Youth Expedition Project - Aided villagers at Pakia Village, Chiangmai in building 8 water tanks and taught villagers basic English
  - Represented NP to attend lectures
- Jan 2013 - **School of Science and Technology, Singapore (SST)**  
Dec 2016 Robotics@ APEX (Member)
- Won champion for Bull's Eye Competition and best presentation for FIRST Lego League

## KEY PROJECTS

- Jun 2019 **STEP STEM ALIVE 2019**
- Developed a mock-up of a house with Micro:bit, sensors, LEDs, cardboard to solve a problem modelled after the United Nations' Sustainable Development Goals
  - Aimed to solve Philippines' urban slums problem and introducing renewable energy and recycling and reducing waste habits
- Mar 2019 **SUTD Compact 3.007 2019**
- Developed a high-fidelity and low-fidelity prototype of an expressive cleaning robot using Arduino, Raspberry Pi and other components
  - Low-fidelity prototype design was submitted to A' Design Award and scored 85/100 for presentation and 5/10 for design
- Oct 2018 - Aug 2019 **Depression Detection using Speech Analysis (Mobile App)**
- Developed an Android application for depression detection with real-time audio visualisation and machine learning
  - Developed and optimised a Convolutional Neural Network model used for detecting depression
- Oct 2018 **International Seminar on Technology for Sustainability (ISTS)**
- Developed a mock-up application with a chatbot, 360° video, customised tour programs and e-tickets to improve user experience for Lomprayah
- Apr 2018 **Development of Arduino system that aids patients with anxiety**
- Used LEDs to aid breathing movements for patients with anxiety, modelled after the 4-7-8 breathing technique
- Oct 2017 **Mockup of Android Application to aid visually impaired**
- Done using MIT App Inventor to aid calling contacts, reading out date and time, capturing audio and media

## OUTREACH

- Sep 2019 **Social Leadership Challenge 2019 - Taiwan**
- Developed capabilities as social leaders and active social contributors to the community at large
  - Study visit hosted by reputable universities and social organisations
- Jun 2019 **STEP STEM ALIVE 2019 - Singapore**
- Interacted with other ASEAN youths while building STEM skills
- Oct 2018 **International Seminar on Technology for Sustainability 2018 - Bangkok**
- Interacted with other Asian youths while working on a problem statement given by companies
- Sep 2018 **7DRAGON China Immersion Trip 2018 - Chongqing**
- Visited businesses such as Tencent and ZhuBaJie
  - Study visit hosted by Chongqing Technology and Business University
- Mar 2018 **The Christieara Programme Youth Expedition Project - Chiang Mai**
- Interacted with SatitCMU students while aiding villagers in Pakia Village
- May 2015 **Global Citizenship Programme - Beijing**
- 5-day exchange programme with Rendafuzhong Xishan School
- Oct 2013 **Global Citizenship Programme - Ho Chi Minh City**
- 5-day exchange programme with Lawrence S. Ting Memorial School

## CERTIFICATES AND AWARDS

### **Ngee Ann Polytechnic**

May 2019	School of Engineering Outstanding Student Award
May 2019	Module Prize (Level 2.2 - Engineering Design)
Dec 2018	Certificate in China Readiness
Oct 2018	International Seminar on Technology for Sustainability (ISTS) 2018 (Lomprayah Award)
Oct 2018	A*STAR Science Award (Poly) AY18/19
Oct 2018	Director's List (Level 1.2)
May 2018	Most Outstanding Performance (Level 1.2)
May 2018	Module Prize (Level 1.2 - Engineering Mathematics 3A, Fundamentals of Object-Oriented Programming)
Nov 2017	Module Prize (Level 1.1 - Innovation Toolkit)
Aug 2017	Ngee Ann Polytechnic Engineering Scholarship AY17/18

### **School of Science and Technology, Singapore**

Mar 2017	Top GCE O-Level Performer for 2016
May 2016	Singapore Junior Chemistry Olympiad (Merit)
Mar 2015 -	Young Engineers Award (Silver, Bronze)
Nov 2014	
Feb 2015	FIRST Lego League 2014-2015 (Presentation - Champion)
Oct 2013	Bull's Eye Robotics Competition 2013 (Category B - Champion)

### **Other Achievements**

Jul 2019	Python for Data Science and Machine Learning Bootcamp
Dec 2018	Python Level 1, Java Level 1
Dec 2018	Android Development: Concurrent Programming
Dec 2018	Leading with Emotional Intelligence (2013)
Dec 2018	Delegating Tasks to Your Team (2013)
Nov 2018	Calc001x: Pre-University Calculus by DelftX
Dec 2011 -	Edusave Awards (Academic Achievement 2018 and 2016, Good Progress)
Aug 2018	

## REFEREES

### **Dr Jaslyn Law**

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### **Dr Pham the Hanh**

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