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Online Resume: https://whatthestone.github.io/kaising

Personal Statement

About Me
Generating innovative ideas has always been my forte. Serving the community has also always been my passion. Combining these traits, I put my creativity to good use whenever I join the relevant committees or take on projects for my community. Through committing to these contributions, I have gained relevant experience and become comfortable with creating technology, designing and marketing.

Work Experience
I had started writing my own HTML and CSS codes since I was 10 for my blogs. In high school, I participated with my team in a coding competition, Young Rewired State Singapore, which gave me an opportunity to learn code, winning the best show award. Additionally, my 2.5 years as a Computer Engineering Student has provided me with an abundance of opportunity to improve on the relevant skills for the tech industry. From programming languages to hardware knowledge, I have had the privilege to obtain a diversity of technical knowledge.

Being passionate about graphic designing since I was 13, I have since realized the importance of good design in any context. Thus, I continued my studies in design thinking through the Innovation and Design-Centric Program. Through this program, I have learnt the tools to put my ideas into place through models such as Value Proposition Canvas and Vigorous Prototyping in the Five Stages of Design Thinking.

As Publicity Head for two school-wide events in 2014, I brought these events to a breakthrough in terms of popularity and reach. The nature of this work taught me valuable marketing skills. I also learnt to work with a tight budget and small manpower size, which is a common scenario in the start-up environment.

Internship Objective
In the upcoming year, I am seeking an internship experience which allows me to improve on my programming, designing and product development skills. It would also be a good opportunity to contribute to the industry that has brought convenience to my life through technology. With my relevant exposure to web design and knowledge of various programming languages through school and past internships, I believe that I can contribute in terms of my programming skills and my eye for design.

Unique Skill Sets
I am adept at using illustrative software e.g. Adobe Experience Design, Illustrator and Photoshop. I am also familiar with multiple programming languages including Java, C, Python and JavaScript. For hardware, I have had exposure to Robot Operating Systems, ARM Assembly Programming, Embedded Systems, Raspberry Pi and Arduino.

How I Can Contribute
My strength lies in my ability to see things from a wider perspective. In addition, what sets me apart is that I strike a balance between the logical and practical side of an engineer and the creativity and innovative side of a designer. Equipped with a wide variety of skills set, I will be able to take on projects of various nature. Firstly, from various internships and modules, I have learnt to pick up new frameworks and languages more quickly. Secondly, my interest with design-thinking allows me to put things into perspective instead of working only on set requirements. Lastly, the multitude of types of work I have been involved in allows me to inject fresh perspective into any project. Apart from the skills I possess, my gritty personality and eagerness to learn ascertains that I will be ready to take on challenges in this internship journey.

Education

	National University of Singapore *(Course details in Appendix A)*
Aug 2015 - Present	Bachelor of Engineering (Honors) in Computer Engineering
Aug 2016 - Present	Innovation & Design-Centric Program
July 2017	Summer School Program: University of British Columbia

	Dunman High School
Jan 2009 - Dec 2014	Integrated Programme (IP)
	Singapore-Cambridge General Certificate of Education Advanced Level

Work Experience

July 2017 – Present

Red Dot Robotics
Robotics Engineer Intern

- Robot Operating System (ROS)
    - Learnt through Raspberry Pi and configuring them to be plug-and-play on autonomous robots
    - Using ROS to operate tester robot with sensors like 2D and 3D Lidar and Ultrasound
- Computer Vision – Image Training and Annotation
    - Aiding a computer vision scientist to train images taken from the vehicle to detect road markings such as stop lines
    - Writing codes to improve the image training
- Understanding autonomous vehicle industry in Singapore

Dec 2016 – Jan 2017

ExchangeBuddy
Intern

- Graphic Design
    - Designed the logo and T-shirt for V2.0
    - Involved in the revamping of ExchangeBuddy
- Marketing
    - Involved in discussion and provided suggestions for social media campaigns.
    - Participated in NUS programs such as SGKAKI and IRO Welcome Party to introduce ExchangeBuddy to exchange students in Singapore.
- Front-end Programming (Basic)
    - Developing the V2.0 for ExchangeBuddy during the Winter holidays.
    - Learnt JavaScript and frameworks and libraries such as ReactJS, Material UI and NodeJS.

Jul 2016

Orbital 2016
Bostock Level

- Created a simple filtering application using ReactJS

Jan 2015 – Jul 2015

Change for Good (Social Initiative Project)
Lead Architect
http://cfg.nfshost.com

- Involved in project planning and architecture of manual vending machine
- Obtained grants from Singapore Youth Council, Singapore Kindness Fund, Picture Perfect Productions

Mar 2015	**Graphic Designing** *Freelancer*	

- Name Cards Design

Apr 2013 – Jun 2014	**Student Councilor and House Committee** *House Captain and Executive Committee Member*

- Publicity Head for two major school-wide events in Dunman High School.
- The team did marketing, design, décor and media generation for the events.

Scholastic Achievements/Extracurricular Activities

Jun 2014	**Awards**

- Young Rewired State – Best Show Award.
  - Designed an application in a team of four, for Singapore to tackle the problem of the seasonal haze in Singapore, winning air tickets to International YRS in London.

Aug 2016 - Apr 2017	**School Contributions**

- Inter-Hall Games Webmaster and Social Media Manager
  - http://bit.do/ihg1617
  - Led a team of 4 for website maintenance and updating.
- Activities in Kent Ridge Hall:
  - Volleyball Captain.
  - Graphic Design Team.

Aug 2015 - Apr 2016	**School Contributions**

- Activities in Kent Ridge Hall:
  - Video Production Team.
  - Information Technology Committee.

Skill Sets & Proficiency Level

Multimedia	Adobe Photoshop/Illustrator CS6, Adobe Premiere Pro Audacity Audio Editor	Intermediate Proficient
Web	HTML, CSS, Adobe Experience Design CC (Beta)	Proficient
Programming / Scripting	Java, C C++, Python, JavaScript, Unix Shell Scripting (bash, sh)	Proficient Intermediate
Hardware	Robot Operating System (ROS), Arduino, Raspberry Pi, ARM Assembly Language Programming, FPGA	Intermediate
Editors	Vim, Nano, Sublime Text	Proficient
Integrated Development Environment (IDE)	Visual Studio, Eclipse	Proficient
Miscellaneous	Content Generation, Social Media Management, Event Planning	

Language Proficiency

Spoken	English – fluent; Mandarin – fluent
Written	English – competent; Chinese – competent

Degree: Bachelor of Computing (Honours) in Computer Engineering
Cumulative Average Point: 4.01 / 5.00

Year	Level	Course Description	Grades
Aug – Nov 2015	Year 1/Semester 1	Introduction to Computer Engineering	A
		Programming Methodology	B-
		Discrete Structures	B-
		Quantitative Reasoning	A-
		Mathematics I	S
Jan – May 2016	Year 1/Semester 2	Electrical Engineering	B+
		Data Structure and Algorithms I	S
		Critical Thinking and Writing	A
		Mathematics II	B
		Physics IIE	A-
Aug – Nov 2016	Year 2/Semester 1	Effective Communication for Computing Professionals	A
		Software Engineering	B-
		Digital Fundamentals	B+
		Devices and Circuits	B
		Practicing Design Thinking #	A-
		Changing Landscapes of Singapore	B
		Roots and Wings – Personal and Interpersonal Effectiveness 1.0	CS
		Independent Work – Orbital Project	CS
Jan – May 2017	Year 2/Semester 2	Signals and Systems	A-
		Real-Time Operating Systems	B+
		Programming for Computer Interfaces	A-
		The Theatre Experience	B
		Innovation & Design-Centric Program Project #	IP
Jun – Jul 2017	Year 2/Special Term 2	Design in the Public Realm	89%*
		Landscapes and Parks in the Vancouver Region	90%*
Aug – Nov 2017	Year 3/Semester 1	Industrial Attachment	IP
		Innovation & Design-Centric Program Project #	IP

The **Innovation & Design-Centric Program** is a program of a different track for engineering students. Students get to work on engineering problems using design thinking principles in a team of various engineering backgrounds. Projects vary from Internet of Things to Mechanical Designing. Students must find pain points of case studies chosen to design and engineer a product for the specific problem. This program includes design thinking modules *(Practicing Design Thinking)* and year-long projects *(Innovation & Design-Centric Program Project)*.