Jeremy TAN, TAN Koon Wee

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Personal Statement

About me

A word that sums me up as a person is "maker". I make both digitally and physically, through photography and videography, 3D modelling and printing, code and many other mediums. For me, the drive to make and create things is motivated by the intrinsic idea that we have so much power in our hands to mould, shape and frame the world around us. I am inspired by the great innovators of our time who have pushed the various boundaries in technology, and I hope to one day emulate the impact that they've had on our world.

I believe that one important quality that I possess as a maker is initiative. I pride myself on the ability to identify what I perceive to be gaps in the systems around me. These are the gaps in which I aim to take the initiative to apply the skills that I have and innovate better solutions. This has manifested in various aspects of my life, be it in my working experience, volunteering experience or leadership experience.

As an individual, I hope to continue developing and refining these skills to solve ever evolving problems, innovating new and creative solutions as I go along to hopefully leave a positive impact on the world around me one day.

Work experience

My working experience primarily consists of stints at two different startups here in Singapore. The first of which was at Techsumption, where I operated in the role of a full-time Operations Manager for 2 years. In this role, I led 22 projects involving data manipulation, web scraping and market research for clients in Singapore, Australia and Hong Kong. I was also fortunate enough to be given the opportunity to organize a startup contest in Singapore, where I had the chance to immerse myself in the local startup scene. Throughout my 2 years, I introduced and developed sustainable and standardized software development practices in the company through taking the initiative to apply some of the practices learned from school. In addition, I worked closely with new interns to mentor them and introduce them to operations at Techsumption.

Currently, I am interning at LevelUp, a startup that is focused on providing every child with the right tools and guidance to succeed in life. At LevelUp, my role primarily involves setting up and maintaining the systems that provide services to both our employees and customers on a day-to-day basis. I work with a variety of departments in the company to implement software that helps them reach their goals. For example, one of my tasks involved working with the marketing department to setup various data collection and data analytics pipelines to aid them in better understanding our customer engagement. I also had the opportunity to develop an OpenAI backed Telegram chatbot that quizzes university students on various questions, generating feedback on the fly to guide their learning process.

How I can contribute

Through the various working experiences that I've had, I have been exposed to projects that range across different domains and scales. I believe that I can use this adaptability to my advantage to aid my problem-solving in the tasks that I may face in any new position. I also believe that my track record of displaying initiative at every organization I've been in will be an asset, as I will always be looking to push the boundaries and seek growth. In addition, I embody the entrepreneurial spirit as demonstrated in my endeavor to launch my own 3D printing store, and I am sure that this will align with the values of startups that I work with. Finally, I am always hungry to learn and grow, and I am excited for any opportunity that enables me to do so.

National University of Singapore (NUS)

Aug 2019 - May 2023

Bachelor of Computing in Computer Science

- Awarded NUS Merit Scholarship
- Current GPA: 4.41/5 (as of end of Y2S2)

(Course details in Appendix A)

Hwa Chong Junior College

Jan 2015 - Nov 2016

GCE 'A' Levels

- Awarded Ministry of Education Edusave Scholarship for Independent Schools
- University rank point of 87.5/90, scoring A in Physics, Economics and Mathematics

WORK EXPERIENCE

Makercube, Singapore

Founder

Aug 2021 - Present

- A self-hosted webstore dedicated to 3D printing enthusiasts, supplying a range of 3D printer kits and accessories
- Generated \$20,000 in revenue in the first 2 months of operation, with customers in Singapore, Australia, Germany and Austria
- Utilizes a self-implemented 3D product customization tool for potential customers to personalize and visualize their ideal product

LevelUp, Singapore

TechOps Intern

Aug 2021 - Present

- Developed an OpenAl backed Telegram chatbot to quiz university students and provide automatically generated feedback for their wrong answers
- Maintained a Psychometric Analysis chatbot on Landbot.io, implementing payment gateways and data analytics pipelines

Techsumption, Singapore

Operations Manager

Mar 2019 - Jan 2021

- Led 22 projects, customizing data manipulation, web scraping and market research solutions for clients from universities in Singapore, Australia and Hong Kong
- Organized a startup contest in Singapore, subsequently travelling with winners to Nanjing, China to facilitate participation in overseas leg
- Initiated good software engineering practices, providing a framework for future projects
- Mentored 4 new interns

Crucible Education Centre, Singapore

Part-Time Software Engineer

Feb 2019 - Nov 2019

- Provided consultation on suitable software for center's invoice management system to help reduce tedious routine work
- Developed an invoice notification and reminder system, utilizing Selenium to interface with WhatsApp Web, Apache POI to read Excel sheets and JavaFX for the GUI
- Enabled center to mass send personalized invoice reminders to students and parents
- Created 2 versions of software using an iterative model, incorporating client's feedback
- Collaborated in a two-man team, gaining experience with proper collaborative processes

Republic of Singapore Air Force (RSAF) - 163 Squadron, Singapore Transport Unit Detailing Clerk

Jun 2017 - Jan 2019

- Organized over 100 vehicles and drivers, planning schedules and liaising with external units to fulfil
 operational needs
- Developed a resource monitoring and allocation program in Excel as a side project, reducing user error
- Awarded Squadron and Command level Best Airman awards for year of 2018
- Nominated for RSAF Best Airman 2018

LEADERSHIP AND VOLUNTEER EXPERIENCE

KampungKakis, Singapore

Tech Team Lead Aug 2021 - Present

- Developed and improved algorithms for more efficient matching of beneficiaries to volunteers
- Implemented automation pipelines to ease the workload of volunteers

Faculty Community Service Program - Club Rainbow Singapore Annual Party, Singapore Head of Organizing Team

Apr 2016 - Apr 2016

- Led a team of 16 to organize a walkathon and carnival for chronically ill children and their families
- Managed over 200 volunteers and a crowd of over 200 beneficiaries and caregivers
- Established a new partnership between Hwa Chong Junior College Artemis faculty and Club Rainbow Singapore for future community service efforts

Overseas Community Involvement Project - Boy's Brigade Learning Centre, Siam Reap, Cambodia Program Team Nov 2015 - Dec 2015

- Taught English to underprivileged Cambodian students of age 5-18
- Devised creative lesson plans and scheduled volunteers over 2 weeks

PROJECTS

3D Printer Kit Color Customizer

Software Engineer

Jul 2021 - Present

- An online platform for potential builders of 3D printers to configure and visualize the colors of their kit on a 3D model
- Developed in HTML and JavaScript using the Three.js library for loading, manipulating and displaying dynamic 3D models

ZooKeep

Software Engineer

Aug 2020 - Nov 2020

- A Command Line Interface desktop app for managing animals under a zookeeper's care
- · Developed in Java using JavaFX for the GUI

Malnook

Software Engineer

May 2020 - Jul 2020

- A 2D top-down shooter game that adapts to real world elements to increase re-playability value
- Developed in Unity3D with C#, incorporating Google Maps and OpenWeatherMaps APIs

LANGUAGES, SKILLS AND INTERESTS

- English (Written and spoken), Mandarin (Spoken)
- Java, JavaScript, Python, C++, HTML, CSS, Unity, Docker, RESTful APIs, MQTT, Google Cloud & Apps Script, Fusion 360, Adobe Suite, Microsoft Office
- Internet of Things/Embedded Systems, Artificial Intelligence, Computer-Aided Design (CAD), 3D Printing

Degree: Bachelor of Computing in Computer Science

Cumulative Average Point: 4.41 / 5.00

Year	Level	Course Description	Grades
Aug – Nov 2019	Year 1/Semester 1	Programming Methodology	A
		Discrete Structures	В
Jan – May 2020	Year 1/Semester 2	Programming Methodology II	A
		Linear Algebra	A
		Data Structures and Algorithms	B+
Aug – Nov 2020	Year 2/Semester 1	Software Engineering	A-
		Introduction to Computer Networks	A-
		Computer Organization	В
Jan – May 2021	Year 2/Semester 2	Introduction to Artificial Intelligence	A-
		Probability and Statistics	A
		Introduction to Operating Systems	B+
		Design and Analysis of Algorithms	B+
Aug – Nov 2021	Year 3/Semester 1	Machine Learning	In-progress
		Database Systems	In-progress
		Communicating in the Information Age	In-progress

NUS Grading Scale:

A+ & A (5.0); A- (4.5); B+ (4.0); B (3.5); B- (3.0); C+ (2.5); C (2.0); D+ (1.5); D (1.0); F (0)

S = Satisfactory; U = Unsatisfactory

CS = Completed Satisfactorily; CU = Completed Unsatisfactorily

EXE = Exempted; IC = Incomplete; IP = In Progress; W = Withdrawn



31 Aug 2021

NUS Overseas Colleges (NOC) 21 Heng Mui Keng Terrace, Singapore 119613

LETTER OF RECOMMEDATION FOR JEREMY TAN KOON WEE

This letter is in strong support of Jeremy Tan's application for the NUS Overseas Colleges Programme.

Jeremy has been employed as an intern at LevelUp since July 2021. He is currently operating in the role of TechOps intern where he applies his skills to maintain the backend systems that keep LevelUp operating on a day-to-day basis. Jeremy is bright, intellectually curious, critical and questioning. He is highly motivated, and strives to do his best in every task he engages in. In my opinion, there's no question that Jeremy makes a great candidate for NOC experience. I believe he will make the most of the opportunities presented to him during NOC and will represent the University with the highest standards. The programme will also drive and develop his already substantive interests and growing capabilities in entrepreneurship to higher levels.

An invaluable aspect that Jeremy brings to the Tech team here at LevelUp is his personal enthusiasm for all things technology related. Drawing from his own experience from experimenting with various platforms in his free time, Jeremy is able to take the initiative to suggest unique and innovative solutions for the challenges faced in implementing projects. For an NLP chat bot that he worked on recently, Jeremy was able to deploy it on his homebuilt server at home during the testing period, providing us with a good idea on how it may perform when deployed in a production environment. I believe that his innate passion for the field that he works in will greatly contribute to his ability to succeed.

As his supervisor, Jeremy has been a pleasure to work with. He has the relevant competencies and skills in programming and backend engineering that would make him a valued asset to companies during his NOC experience. Furthermore, Jeremy has a strong work ethic and is able to get things done. Through the daily catch-up meetings and code reviews, Jeremy has actively asked for feedback on how his implementations or presentation can be improved. He has demonstrated the ability to internalize these suggestions and improve on the next iteration regardless of what he may be working on.



As an NOC alumni, ambassador and entrepreneur, I recognise many of the traits that have pushed me into entrepreneurship in Jeremy. I wholeheartedly support Jeremy's application to NOC and have no doubt that he will make the NOC programme proud, represent NUS well and achieve his goals and more during his experience.

Yours truly,

Joel Yap

Head of Tech

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