### **ALEXANDER Matthew**

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## **Personal Statement**

#### **About Me**

I am a penultimate Computer Engineering student who is passionate in using technology to solve everyday problems. Stories of developers and hustlers designing and creating successful products in their garage leading to market disruption surrounds me since young. These startups, such as Uber and Airbnb, continues to inspire me to dive into the world of technology & startups.

A strong believer that technology being the solution to many real life problems, I picked up programming skills within and outside of my major in hopes to further equip myself with relevant skills. Other than constantly upgrading myself, I am actively involved in the entrepreneurship community and scene in Singapore & Indonesia to know and learn more.

#### **Internship Objectives**

I am looking to expand my skillsets in software engineering, especially in web development by joining a startup. Besides that, I also want to see good industry practices in software engineering, on how to build products that can scale with the growth of the startup & user base. In addition, I am excited to be part of a team and experience the lifecycle of product building - from ideation to development, then launch and iterations. Having a one-year internship would allow me to see the full journey for the product.

Besides honing my technical skills, I want to learn how startups evolve as it grow. I am interested to learn, in terms of structure and project management, how products are being brainstormed, built and managed.

#### **Experience**

Last year, I experienced interning as a software engineer for a peer to peer fin-tech lending firm called Taralite. During my time there, I was tasked to integrate DocuSign API to digitalise the physical contracts to e-contracts with digital signatures. In addition to my project, I revamped the loan lifecycle to reduce redundant tables in database that removed one stage of the life cycle.

Working in Singtel during my summer vacation, I developed the backend for Singtel Cloudshop, a B2B Cloud Services Marketplace that sells AWS, GCP, etc. During my time there, I helped develop the main features for the marketplace that include password service, purchase services, automated email service.

Internships aside, I am currently working on my own project with a few friends out of personal interest. Our project is called Scr.io, where we build a forecasting tool for call centre managers to staff their agents. I built the prototype for the dashboard using d3 & Angular. Scr.io received SGD 10,000 funding from NUS Enterprise.

On the side, I join hackathons to have fun and explore the latest technology to solve real company problems in a build fast and break fast mindset. Earlier this year, I joined the Bank of America Code to Connect Hackathon and clinched 2nd place. Our team built a forex arbitrage engine using client server socket architecture. I also joined a hackathon organised by AngelHack in which we won the Grab Challenge. We built a drowsiness detection alert system for drivers and my role was to build the database using Firebase to give triggers when driver was drowsy to the dashboard.

### **Strengths & Weaknesses**

My strengths include managing multiple commitments at the same time. I am currently managing multiple commitments that include studies, head of an entrepreneurship conference, dormitory head planning events, teaching assistant and my side project Scr.io with friends.

On the other hand, my weaknesses include me not being well versed in public speaking, hence I am trying to improve myself to become better by giving myself more opportunities to step out of my comfort zone to talk such as through the leadership roles that I take in my extracurricular activities.

### **Education**

Merrill Lynch

Aug 2017 -**National University of Singapore** Singapore Present Bachelor of Engineering (Hons) in Computer Engineering With Second Major In Innovation & Design Dean's List - AY18/19 Semester 2 (Top 5%) (Course details in Appendix A) Jul 2015 - Jun Springfield International School Singapore 2017 • Cambridge International Examination General Certificate of Education - Advanced SAT: 1450/1600 **Experience** Aug 2019 -**NUS School of Computing** Singapore Present Teaching Assistant Teaching & guiding class of students on Software Engineering & Object-Oriented Programming in Java May 2019 -Singtel (Group Enterprise) Singapore Aug 2019 Software Engineer Intern Spearheaded RESTful API Singtel for Singtel CloudShop - Cloud Services B2B Marketplace reselling AWS, GCP, Azure with an estimated 7-digit revenue Developed user purchase flow for enterprise clients including automated emails, password service Built overall service with NodeJS, MongoDB utilising AWS stack (Lamdba, S3, EC2, SES) May 2018 -Taralite - Subsidiary of OVO Jakarta, Indonesia Aug 2018 Software Engineer Intern Integrated DocuSign API to replace legacy loan confirmation API service with GCP tools (GCS, Cloud Function) using Node JS & Sequelize Spearheaded transformation of loan life cycle for more than 3000 loans to be legally binding using digital signatures with DocuSign Removed loan confirmation data from legacy system to streamline loan process by 20% **Projects & Hackathons** Scrio.ai **Software Engineer** Singapore Scrio.ai is a workforce management system for contact centres, it uses neural networks to forecast call volume & recommend staffing schedules Develop data visualisation dashboard for contact centre managers with d3, Angular, Node & MongoDB Secured \$10,000 funding from NUS Enterprise & booth at Innovfest Unbound Bank of America Code to Connect (Hackathon) - Forex Arbitrage Engine Singapore

Won 2nd place in Forex Exchange Arbitrage Challenge

architecture using socket.io

In team of three, built an arbitrage engine that can detect profit from the difference

in forex quotes from different liquidity providers using client server socket

Everyday Challenge	<ul> <li>Everyday Challenge - Android App</li> <li>During hackathon, built Android app with Java &amp; Android Studio to give users random daily challenges and share their progress to Facebook &amp; WhatsApp with zero Android experience</li> <li>Implemented &amp; integrated different activity classes for the challenges &amp; user's progress</li> </ul>	Singapore
iFatigue	<ul> <li>AngelHack Singapore - iFatigue</li> <li>Won Grab Challenge Prize for AngelHack amongst 30 teams</li> <li>In team of three, built software that could detect drowsy drivers and dashboard that could notify administrators with Firebase on the backend</li> </ul>	Singapore
Police Records Database	<ul> <li>Police Records Database</li> <li>Application written in Java with JUnit tests for police officers &amp; headquarters personnel to manage criminal records &amp; communication</li> <li>Developed features for editing the criminal records, dispatching backup, integrating location with Google Maps API</li> </ul>	Singapore
OnDmand	<ul> <li>OnDmand - Web Application</li> <li>OnDmand is a platform that allows employers and part-time job seekers to connect with each other in NodeJS, MySQL, ejs</li> <li>Implemented chatroom, login &amp; authentication with socket.io &amp; PassportJS</li> </ul>	Singapore

## **Extra-curricular Activities**

Jul 2019 -**NUS Entrepreneurship Society** Present

Project Director of UNICON

Singapore

- UNICON is Asia's largest student run tech-entrepreneurship conference attracting more than 30 speakers previously such as Chatri Sityodong (CEO ONE Championship), Sidu Ponnappa (MD Gojek India) with more than 400 participants from all over Asia
- Leading a team of 26 members ranging from operations to sponsorships for UNICON2020 in February with estimated revenue of more than \$20,000
- Invited MD Microsoft Singapore, MD Gojek Singapore, Head of Technology PayPal Singapore to talk for UNICON2020 in February 2020

# **Skill Sets & Proficiency**

C++, Java, SQL, C, Python Languages

Web NodeJS, Express, HTML, CSS, Angular, d3, Typescript, Sequelize, MongoDB

Verilog Hardware Design

# **Language Proficiency**

Spoken English - fluent; Indonesian - fluent; Mandarin - basic;

Written English - competent; Indonesian - competent; Mandarin - basic;

## **APPENDIX A**

**Degree:** Bachelor of Engineering (Hons) in Computer Engineering with Second Major in Innovation & Design **Cumulative Average Point: 4.51 / 5.00** 

Module Types	Course Description	Grades
Programming & Projects	Data Structures & Algorithms	А
	Software Engineering & Object-Oriented Programming	A-
	Programming Methodology	B+
	Independent Software Development Project (Orbital)	CS
	Design Centric Programme Project	IP
	Machine Learning	IP
	Database Systems	IP
	Computer Vision & Pattern Recognition	IP
Computer Science and Engineering Theory	Computer Organization	А
	Transistor-Level Digital Circuits	A-
	Real-Time Operating Systems	A-
	Discrete Structures	B+
Mathematics	Linear Algebra for Engineering	А
	Probability & Statistics	А
	Signals & Systems	А
	Differential Equations for Engineering	A-
	Engineering Calculus	B+
Engineering Projects	Engineering Principles & Practice I	B+
	Engineering Principles & Practice II	Α-
	Digital Design	B+
Languages & Communication	English for Academic Purposes	A-
	Chinese 3	S
	Effective Communication for Computing Professionals	A-
	Engineering Professionalism	IP
Miscellaneous	Case Studies in Engineering	А
	Quantitative Reasoning	A-
	Introduction to Design Thinking	S
	Asking Questions	CS
	Journey of the Innovator	CS
	Career Catalyst	CS
	Learning to Learn Better	CS
	Global Economic Dimensions of Singapore	S
	Universe, Big Bang & Unsolved Mysteries	IP

## **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



2<sup>nd</sup> August 2019

## RE: LETTER OF RECOMMENDATION FOR MATTHEW ALEXANDER

To whom it may concern,

It is my pleasure to provide this letter of recommendation for Matthew Alexander. As a Project Manager and one of the key Product Owner for the Singtel CloudShop Project, I have worked closely with Matthew over the past three months. Matthew played the role of a back-end developer, led by a more senior developer.

Matthew is professional in his engagements. He was punctual for team discussions and meetings with other project stakeholders. He also managed to build good rapport with the team.

Matthew is technically competent and resourceful. He was able to understand the technical concepts and proceed to implement with some supervision — which I am impressed with given the limited industrial exposure he has.

I find Matthew a dependable person and a valued team player. He is always ready to lend a helping hand to fellow teammates and contributes actively during discussions and meetings. He has also delivered what he has committed.

In conclusion, I would like to express my strong support for Matthew. I am confident that Matthew will continue to excel in any role he choose to play. He is driven, confident, proactive and passionate.

I can be reached at +65 84282918 or hannywong@singtel.com should you require further assistance or information pertaining to Matthew's performance.

Yours sincerely,

Hanny Wong (Mr.)

Senior Product Development Manager

Enterprise Data and Managed Services - Cloud

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