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Personal Statement

My name is Marcus and I am a sophomore undergraduate at the National University of Singapore (NUS) pursuing a degree in Computer Science. I am currently seeking a year-long internship with a startup in the San Francisco (SF) Bay area, preferably in a software engineering or data science / machine learning role. However, as I am aware that roles and responsibilities in a startup can be very fluid, I am open to contributing in a broad range of tasks.

Internship Objectives

There are three objectives that I hope to achieve during the internship. Firstly, to learn how startups in SF operate as I aim to start my own company in the future. Secondly, being results-driven, I seek to actively contribute to the growth of the company through high-impact projects. Lastly, I hope to make it a memorable experience by forging some lasting connections at work.

Work Experience

I have experience working for different types of organization across various industries, such as a government agency, an SME, my own university and a hedge fund. Throughout these experiences, I have learnt to thrive in fast-paced environments and adapt myself to various modes of problem-solving in different contexts.

One of my key experiences was working with the Agency of Science, Technology and Research (A*STAR) as a Data Analytics Intern. It was my first professional working experience in a technical role. Having an aptitude for self-learning, I was able to pick up Python, R and Javascript and use them to deliver two proof-of-concept projects by the end of the internship. One project involved developing a web crawler to scrape the profiles of civil servants, creating data cleaning scripts and building a web app to visualize their career paths. The other was a soccer simulation app that was a proof-of-concept as a low-cost solution for collecting soccer performance statistics.

More recently, I am currently juggling my studies and quant research consulting work with a hedge fund. The quant research work focuses on the objective of identifying trading signals. To achieve this goal, I took ownership of data analytics projects where I processed and analyzed proprietary datasets and presented a clear written report on whether there is value (or not) in these datasets. This experience has allowed me to acquire strong analytical, research and written communication skills.

How I Can Contribute

My technical skill sets include full-stack web development, data analysis and quantitative research. I am capable of both developing products and mining insights out of the data to improve on business objectives.

Beyond technical skills, I am an effective communicator who can translate between technical concepts and business ideas. I also have strong planning and organizational skills after having successfully completed several technical projects through my experiences. I enjoy working in teams but am also capable of delivering results independently.

Please do not hesitate to contact me to know more about how I can be of value to your company. Thank you.

Education

Aug 2018 – Present	National University of Singapore (NUS) <i>Bachelor of Computing (Honours) in Computer Science,</i> <i>Focus Area – Artificial Intelligence</i> <i>(Course details in Appendix A)</i>	Singapore
Apr 2012 - Apr 2015	Ngee Ann Polytechnic <i>Diploma (with Merit) in Information Technology, GPA 3.93/4.00</i> <ul style="list-style-type: none">• Top 10% of Graduating Cohort• Awarded Ngee Ann Polytechnic Scholarship for outstanding academic results, strong core values and leadership qualities• Awarded A*Star Science Award (Poly) for outstanding academic performance and aptitude in science and research	Singapore
Jan 2019 – Feb 2019	Self-Learning <ul style="list-style-type: none">• Hackwagon Academy Data Science 102 Course: This course focused on Pandas, data visualization, web scraping, text mining and machine learning models (Scikit-learn)	Singapore
Ongoing	<ul style="list-style-type: none">• Udemy courses taken or in-progress includes Node with React: Fullstack Web Development, Modern React with Redux, The Web Developer Bootcamp, and so on	Online

Work Experience

Mar 2019 - Present	Hedge Fund (Confidential) <i>Quant Research Consultant</i> <ul style="list-style-type: none">• Successfully delivered multiple analytics projects with the objective of identifying trading signals• Learnt to conduct literature review, data preparation, data profiling, feature engineering, hypothesis testing and regression modelling in practice and gained knowledge of a clear and cohesive data analysis workflow	Remote
Jan 2019 - May 2019	National University of Singapore <i>Teaching Assistant for Programming Methodology II</i> <ul style="list-style-type: none">• The course explores objected-oriented programming methodology and functional programming• Prepared learning materials and learnt to clearly communicate technical concepts in my weekly programming lab sessions with the students	Singapore
Sep 2018 – Mar 2019	<i>Student Lab Assistant / Software Developer</i> <ul style="list-style-type: none">• Assisted students and faculty with the use of Bloomberg Terminals in the Investment Management & Trading Lab in the NUS Business School• Implemented a web application to display live market price feeds powered by the Bloomberg API, seen by many visitors as they pass by the lab	Singapore
Dec 2017 – Jun 2018	Overall Productivity Solutions Private Limited (OPS) <i>Software Developer Intern</i> <ul style="list-style-type: none">• OPS is a technology consulting SME with the passion to optimize productivity and allocate resources efficiently• Assisted the lead developer in the development of an automatic rostering application for the cinema industry	Singapore
Apr 2014 – Aug 2014	Agency of Science, Technology and Research (A*STAR) <i>Data Analytics Intern</i> <ul style="list-style-type: none">• A*STAR is a government agency which seeks to advance science and develop innovative technology to further economic growth and improve lives	Singapore

- Wrote a web crawler to scrape profiles of civil servants in Singapore, processed the scraped data and used it to build a web app, which analyzes the career paths of civil servants
- Created a soccer simulation app as a proof-of-concept for a low-cost solution to recording soccer performance statistics

Scholastic Achievements/Extracurricular Activities

Sep 2018 – Present	School Contributions <ul style="list-style-type: none"> • Global Macro Research Analyst for NUS Investment Society (Publication) 	Singapore
2014	WorldSkills Singapore - IT Software Solutions for Business <i>Finalist</i> <ul style="list-style-type: none"> • Developed a solution for the business case of managing ticketing and seats of the 2014 FIFA World Cup 	Singapore
2013	Singapore Computer Society Splash Awards Competition <i>2nd Runner Up</i> <ul style="list-style-type: none"> • Led a team of 3 to create a game for windows mobile (C#) 	

Skill Sets & Proficiency

Programming Languages	Python Javascript Java R	Proficient Proficient Intermediate Novice
Data Science	Numpy, Pandas, Scipy Scikit-learn, Statsmodel Matplotlib, Seaborn, Plotly	Proficient Intermediate Proficient
Web Dev (Back-end)	Django Flask Node.js/Express	Intermediate Intermediate Intermediate
Web Dev (Front-end)	HTML, CSS Javascript React	Intermediate Intermediate Intermediate
Database	SQL: MySQL, PostgreSQL NoSQL: MongoDB	Novice Novice
Non-technical Skills	Project Management Writing/Publications Software Documentation Requirements Gathering	Intermediate Intermediate Intermediate Intermediate
Office Productivity	Microsoft: Word, PowerPoint, Excel Slack Trello	Proficient Proficient Proficient

Language Proficiency

Spoken	English (fluent), Chinese (fluent), Korean (basic)
Written	English (fluent), Chinese (intermediate), Korean (intermediate)

Additional Information

Interests	Reading (self-development, business, technical, finance), Trading/Investments, Fitness
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Degree: Bachelor of Computing (Honours) in Computer Science
Cumulative Average Point: 4.28 / 5.00

Year	Level	Course Description	Grades
Aug – Nov 2018	Year 1/Semester 1	Programming Methodology II (Java)	A
		Discrete Structures	B+
		Linear Algebra	B+
		Fundamentals of Physics	A
		Calculus for Computing	S
Jan – May 2019	Year 1/Semester 2	Data Structures and Algorithms (Java)	B+
		Computer Organisation	B
		Introduction to Computer Networks	A
		Probability and Statistics	B-
		Quantitative Reasoning	S
May – Jun 2019	Year 1/Summer	English for Academic Purposes	A
Aug – Nov 2019	Year 2/Semester 1	Software Engineering	In-progress
		Effective Communication for Computing Professionals	In-progress
		Introduction to Artificial Intelligence	In-progress
		Design and Analysis of Algorithms	In-progress
		Asking Questions	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