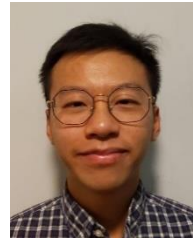**Jonathan Ng, Ng Hian Leong**
Mobile: +65 83995537
Email: jonathan.n@nus.edu.sg
Skype: teddy4234
Telegram: @derpy
Github: derpyplops
Website: jonathanng.dev

Personal Statement

My name is Jonathan Ng. I am a student in the National University of Singapore seeking a company where I can enjoy a culture of deep learning and understanding, where I can further develop my domain expertise in full-stack engineering, DevOps, and information security, and where I can grow as a person.

I like to optimize and fine-tune systems and processes, and in my code is no exception. My ability and passion for clean and efficient code are substantiated by my comprehensive knowledge of data structures and algorithms. In my previous internship in HydraX, I was tasked to build a data adapter that polled and parsed data from many APIs from a mixture of WebSockets and REST endpoints. With no documentation from the previous team and with minimal guidance, I wrote two components which were deployed in production within two weeks of joining HydraX. While reverse-engineering the current codebase with little documentation was a significant challenge, I learnt the value of good documentation, and of course, my skill in node.js grew more than it otherwise would.

In conjunction with my academic studies, I contribute to numerous extra-curricular projects in a volunteer capacity. For instance, I developed a web-based attendance system for my Residential College that scanned QR codes and offered a significant time-cost saving to College events. I also volunteer in my spare time in Effective Altruism (SG), the local chapter for a movement that aims to do the most good, given limited resources. I contribute as a core team member and have helped to organize conferences and meetups. Staying on top of these commitments is only made possible through crucial time management skills that I have developed over the years. This is challenging, but ultimately rewarding.

Now, I am eager to join a team that has a strong engineering culture that is directed, robust, and agile. I would love the opportunity to join a team that produces function, easy to read, performant and testable code. Previous professional experience has taught me, however, that strict adherence to good coding style and the best design patterns is not always practical. The adage that "done is better than perfect" comes to mind. When time permits, I take pride in producing elegant code, but also take note of the needs of deadlines under time pressure.

If you take me on to your team, you will find that I am a keen learner and am open to diverse and novel experiences. You will also find that I am an easy-going and amiable co-worker. I am certain that my passion for learning, together with my personable nature, will make me a great fit for your company.

Thank you for reading, and I hope to hear from you soon.

Education

Aug 2017 - Present	**National University of Singapore** Bachelor of Computing (Honours) Information Security *(Course details in Appendix A)*	Singapore
Jan 2008 - Dec 2014	**Anglo-Chinese School (Independent)**	Singapore

- 39 Points Total:
  - Physics HL (7), Chemistry HL (6), Mathematics HL (7)
  - Spanish AB (7), Business & Management (6), Language & Literature (5)

Work Experience

May 2019 – Aug 2019	**HydraX Private Limited	Software Engineering Intern**	Singapore

- HydraX is a startup whose primary product is Sigma, a multi-venue trading platform for multiple asset classes.
- Back-End developer - Wrote, reviewed and tested code with ReactJS, Jest.
- Wrote and deployed several adapters connecting APIs of trading venues with logic component for Sigma, used by 1000 unique users.
- Built and deployed API documentation from scratch with AsciiDoc. International Baccalaureate

May 2018 – Aug 2018	**Accenture Private Limited	Technology Intern**	Singapore

- Wrote scripts to automate work processes with SAP systems in VBA.
- Wrote and quality checked of user guides for the final stage of UAT of project. HydraX is a startup whose primary product is Sigma, a multi-venue trading platform for multiple asset classes.

Jan 2015 – Dec 2016	**Navy Recruitment Centre	Career Consultant**	Singapore

- Operated the hotline, providing guidance to potential applicants to our military program, handled difficult cases and customers.
- Assisted Officers in with data processing and vetting military candidates.

Scholastic Achievements/Extracurricular Activities

June 2015 - Present	**Effective Altruism	NUS Chapter Lead (Founder)**	Singapore

- Effective Altruism is a global movement that asks how humanity can use its resources to help others the most.
- Conducted Publicity and stage-managed for *EAGx*, a conference exploring EA topics, including *voluntourism*, global poverty, and existential risk. Event attracted 200 participants.
- Organized book club readings and discussion groups for EA-aligned topics.

Aug 2017 - Present	**College of Alice And Peter Tan (CAPT)	Student Leader**	Singapore

- Founder of CAPTs_Lock, a student interest group exploring technology. Conducted market research on, and executed, workshops relevant to student interests (WebDev, Python, etc).
- Developed applications for College use, including a QR code registration system, QR-code inventory management system, and room allocation software.

Skill Sets & Proficiency

Programming	Python	Proficient
	Javascript	Proficient
	C++	Proficient
	C	Proficient
	Java	Familiar
	Shell	Familiar
	HTML & CSS	Familiar
Web Frameworks	Jest	Proficient
	AsciiDoc	Proficient
	Android Developer Studio	Familiar
	React	Familiar
	Redux	Familiar
Web	HTML, CSS	Proficient
	JSP technology	Familiar
	PHP	Familiar
Database	Postgres DBMS	Proficient
	SQL	Proficient
Programming	Java	Proficient
	C	Proficient
	C++	Proficient
	Shell Scripting	Familiar
Security	Penetration Testing	Proficient
	Network Security	Proficient
	Web Security	Proficient
Operating Systems	Ubuntu/Kali/Solus	Proficient

Language Proficiency

Spoken	English – fluent; Spanish – Basic, Singaporean Sign Language – Basic, Mandrin - Basic
Written	English – fluent; Spanish – Basic

Additional Information

APPENDIX A

Degree: Bachelor of Computing (Honours) in Information Security
Cumulative Average Point: 4.03 / 5.00

Year	Level	Course Description	Grades
Aug – Nov 2017	Year 1/Semester 1	Programming Methodology	A
		Discrete Structures	S
		Linear Algebra	S
		Calculus for Computing	S
		Power and Ideas	CS
Jan – May 2018	Year 1/Semester 2	Roots and Wings - Personal And Interpersonal Effectiveness 1.0	A+
		Programming Methodology	CS
		Data Structures and Algorithms	A-
		Computer Organisation	B-
		Quantitative Reasoning	A-
		IS Innovations in Organisations And Society	S
		Community Leadership	A-
Aug – Nov 2018	Year 2/Semester 1	Effective Communication for Computing Professionals	S
		Introduction to Operating Systems	B+
		Introduction to Information Security	B
		Software Engineering & Object-Oriented Programming	B
		Probability and Statistics	B
		Environment and Civil Society in Singapore	S
Jan – May 2019	Year 2/Semester 2	Introduction to Computer Networks	B
		Design and Analysis of Algorithms	B
		Computer Security	B+
		Life, The Universe, And Everything	A-
		Science Fiction and Empire	S
Aug – Nov 2019	Year 3/Semester 1	Penetration Testing	IP
		Computer Security Practice	IP
		Computer Networks Practice	IP
		Information Systems Leadership and Communication	IP
		Database Systems	IP

Notable Classes & Projects

With the fundamentals I've learnt with **Data Structures and Algorithms** and it's tougher cousin, **Design and Analysis of Algorithms**, I've developed deep understanding and appreciation of time and space complexity of different algorithms and have equipped me with intuition to understand when to use which data structure, and the tradeoffs in time and space.

I have honed my software engineering skills with **Software Engineering & Object-Oriented Programming,** which puts me in a great position, together with **Database Systems**, to manage both the frontend and the backend of a web application, giving me the flexibility to work on any part of your tech stack. As part of my Database Systems module, we were tasked to build a web application that polls a PostgreSQL server. I created a Kickstarter clone that tracks projects and donor funding.

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