Ethan Mok Ming Foong

Improving the world through the power of scalable technologies

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WORK EXPERIENCE

Software Engineer, *Hanalytics (Singapore)* **Oct 2017 – Ongoing**
- Design, development and deployment of Qt application to support the search of patient records, display of model generated results, visualisation and modification of 3D medical images by doctors. Tools: VTK, ITK, Qt, ElasticSearch

Software Developer, *Datarama (Singapore)* **Jun 2017 – Sep 2017**
- Design of graph visualisation and database to support the search and navigation of a graph with over 1 million business entities
- Design and implementation of ETL pipeline for web scraped data, focusing on Machine Learning problems in Entity Resolution

Software Engineer, *Motivo Inc. (San Francisco Bay Area)* **Jan 2016 — Dec 2016**
Lead developer for a custom application to support search and navigation of a specialised semiconductor design graph with 2 billion nodes
- Design, deployment, development & testing of application that seamlessly integrates three major technologies (Neo4j, JavaFX & GraphStream) after evaluation of 11 graph visualisation and server technologies
- Design of database schema, tuning, deployment & testing of Neo4j Server which supports traversal of the specialised graph to allow reads up to 19k nodes/s
- Worked with technical team & users to improve the usability and accessibility of the application based on user feedback and principles of user-centered design (e.g. developed custom graph visualisation formats to allow users to visually differentiate up to 100 nodes simultaneously)

Software Intern, *Jublia (Singapore)* **May 2015 — Jul 2015**
- Redesigned natural language processing algorithm to improve accuracy of web scraper for company details from 59% to 87%
- Designed a new version of a computer-generated performance report to track event networking ROI, personalized for each user based on data-driven insights obtained from over a 100k user profiles

EDUCATION

Georgia Institute of Technology, *M.Sc. (Computer Science)* **Aug 2017 - Ongoing**
GPA: 4.0/4.0 **Specialization:** Machine Learning

National University of Singapore, *B.Eng. (Chemical Engineering) (Hons.)* **Aug 2014 — May 2017**
Honours: Honours (Distinction), Second Class Equivalent **GPA:** 4.46/5.00 with 4.5years of academic workload
Awards: Global Engineering Programme Scholarship (3-year Direct Honours for the top 1% of engineering students),
NUS Overseas College Scholarship (For part-time studies at Stanford University while working at Silicon Valley)

Stanford University, *Stanford Center for Professional Development* **Jan 2016 — Dec 2016**
Graduate courses completed: Machine Learning, Computational Methods for Biomedical Image Analysis
Courses projects: Training of agent for Dominion using genetic algorithms, Automatic detection of melanoma from skin images

Raffles Institution, *GCSE 'A' Levels* **Jan 2006 — Dec 2011**
Awards: Fencing National Interschool Championships Team 2nd (2011) Chinese Orchestra SYF Silver (2009) Wan Boo Sow Prize for Top in Chinese Language (2006-2008)

EXTRA-CURRICULAR ACTIVITIES

Yishun Reading Stars, Students' Care Service, *Treasurer* **Aug 2015 — Dec 2015**
Volunteered at Students' Care Service in their Reading Odyssey program by teaching 20 students, aged 7-9, for a year and a half Managed the committee's expenditure and handled financial and administrative procedures.

Orbital 2015, *Gemini Award (Silver equivalent)* **May 2015 — Aug 2015**
Design and deployment of a web application platform to recommend and schedule events between Facebook friends.

Project Cheway, *Member (Operations)* **Oct 2014 — Jul 2015**
Evaluated various reed bed designs from literature to design and prototype a reed bed treatment system, which was later fully constructed Tacloban, Phillipines, to convert 432 litres of soap water to 100 litres of agricultural water for 37 households daily

Innoventure 2014, *Finalist* **Aug 2014 — Mar 2015**
Designed, prototyped and pitched a portable and mobile dispensing platform for distribution of gasoline in a cheap and safe manner at French Polynesia with a team of students from different disciplines to Total
- Evaluated and sourced various materials to build and design a robust product that matched industrial regulations for petroleum
- Liaised with Total Oil Asia-Pacific Pte Ltd to design a product that meets industrial and customer specifications

SKILLS & INTERESTS

Spoken Languages: English, Mandarin **Languages:** Python, Java, MATLAB, JavaScript, SQL, HTML, CSS
Database: Neo4j, MSSQL **Cloud:** AWS, Heroku **Frameworks:** Django, Maven **Development:** JavaFX, Android, Qt
Deployment: Docker **Interests:** Cognitive Psychology, Digital Games, Entrepreneurship, Investments, Community Service