Eric Han

Student

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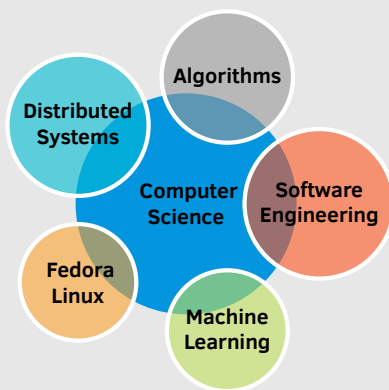in /in/eric-han-lw

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Skills

Overview

Programming

Basic ——————→ Working

Java . C++ . Python . Javascript

C . HTML . Latex . Markdown

Haskell . C# . SQL . Bash

Projects

CS3230R - Investigated and compared 2 algorithms that tackles the k- Community Detection Problem.

CS2100R - Implemented MIPS virtual machine in Javascript with visualization.

CS3201/02R - Reviewed Static Program Analysers, defined a javascript-like language, proposed new language relationships and implemented a reference.

CS3219R - Studied and implemented several software patterns for teaching.

Pinder - Co-founded startup, Pinder, application to recommend(based on location) events to users.

Education

2013-2017	**Bachelor of Computing**	National University of Singapore (NUS)

Graduated With Honours (Highest Distinction) in Computer Science
Completed the Turing Programme.

Achievement

2017	**Dean's List Recipient**	NUS

Dean's List is awarded to top 5% of the cohort.

2016	**Certificate of Merit in Algorithms & Theory Focus Area**	NUS

Awarded to students who have done well in their focus area.

2013	**AUS Scholar**	Agency for Science, Technology and Research (A*STAR)

*Awarded the A*STAR Undergraduate Scholarship (AUS)*
AUS is a prestigious scholarship awarded to budding scientists.

Research

AY2016/17 1 Year	**Final Year Project**	NUS / A*STAR IHPC CS AI Group

Feature Subset Selection (FSS) using Reinforcement Learning (RL)
Tools: Python, Bash, gym, numpy, scipy, scikit-learn, tabulate, openml, plotly, kerlym, keras, tensorflow, auto-dnn, scikit-feature
Thesis: FSS algorithm should be able to find features for a generic dataset and balance between prediction performance and speed.
- Proposed and implemented 2 different wrapper based frameworks, built on several of Google deepmind's works.
- Proposed and tested a novel modification of Q-Learning and applied it to FSS. Tested Q-Learning based framework against 22 state of the art algorithms across 8 datasets and 2 inductors.

AY2014/15 1 Year	**Undergraduate Research Opportunity Program**	NUS

Configurable Web Crawling
Tools: Java, Maven, Solr, MongoDB, Apache HTTP Client, numactl
Thesis: Web Crawlers should be reliable, anonymous and configurable. They should also extract information to structured data.
- Proposed and implemented a distributed/multi-threaded architecture (crawler, proxy and database servers) for web crawling.
- Deployed in production for a Master's Coursework (Sociology).

Experience

1 Dec 17-26 Apr 18	**Quality Control IT Project (Webapp, Android)**	Scanteak

Software Development using Google App Engine infrastructure.

30 May 17-30 Jun 17	**Software Developer (Automation)**	Scanteak

Developed internal applications to automate processes.

27 May 16-19 Aug 16	**Software Engineering Intern**	Church of Singapore Bukit Timah

Church Management System (CHMS)
Study existing systems, propose and implement a CHMS portal.

6 May 15-31 Dec 15	**Research Intern**	A*STAR IHPC CS DC Group

Autonomous Machine Learning using HPC Approaches
Contributed to a cloud based Machine Learning platform.

18 May 15-15 Jun 15	**Sharing on Computational Thinking**	Pioneer Junior College

Taught computational thinking to junior college students.

14 Jan 13-13 Jul 13	**Research Intern**	A*STAR IHPC CS DC Group

Route My Day - Recommends routes and point-of-interests to users
Contributed to a end-to-end recommender system.

10 Feb 11-09 Dec 12	**2SG - Second Sergeant**	Singapore Armed Forces

Combat Engineer Trainer - Managed and trained men/cadets