Julius Putra Tanu Setiaji

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Education

National University of Singapore   *Singapore*

Year 3 Undergraduate, Bachelor of Computing (Computer Science), Honours   *Aug 2017 - Dec 2020 (expected)*
- Current CAP (Cumulative Average Points): 4.71 out of 5.00
- Coursework: Parallel Computing, Information Retrieval, Operating Systems, Data Structures & Algorithms, SICP, Linear Algebra

Technical Skills

Experienced Languages	Scala, SQL, Python, Swift, Elixir, JavaScript, React, C, Ruby, Bash, Java, PHP, LaTeX, HTML/CSS
Familiar Languages	Rust, Erlang, Objective-C, C++, Haskell
Frameworks	Apache Spark, OpenMP, MPI, UIKit, React, Phoenix, Ecto, Ruby on Rails

Experience

Stripe Inc.   *San Francisco*

Software Engineering Intern (Scala, Spark, React, Flow)   *May 2019 - August 2019*
- Joined Machine Learning Infrastructure team, Signals subteam – in charge of supporting Feature Engineering at Stripe.
- Built **an explorable catalog of machine learning features** to help Machine Learning teams better leverage existing features for new models.
- The catalogue includes visualization of the DAG (Directed Acyclic Graph) of the data transformation used to calculate the feature, sample data and aggregate metrics such as approximate heavy hitters (calculated using SpaceSaver algorithm).

Garena Online Pte. Ltd.   *Singapore*

iOS Software Engineering Intern (Swift, Objective-C, Functional Reactive Programming)   *May 2018 - Aug 2018*
- Developed **Chainsaw LogViewer**, an iOS file viewer app capable of handling 200k lines, extracting ZIP files, syntax highlighting, regex searching, and is integrated with the debugging menu of my team's product.
- App Store link: https://itunes.apple.com/sg/app/chainsaw-logviewer/id1423011730
- Analysed and improved CoreData performance in the company's iOS application by mitigating $(n+1)$ query problem.

Source Academy *(https://github.com/source-academy/cadet/)*   *Singapore*

Backend Architect and Team Lead (Elixir, Phoenix, Ecto, AWS)   *May 2018 - May 2019*
- Managed a team of 4 people developing a scalable back-end of Source Academy, the website for NUS CS1101S course, including features such as distributing problem sets, collecting answers, comments on student codes, and auto-grading (on AWS Lambda serverless architecture)
- Designed the overall architecture of the system, including the database schema and API with input from the front-end team.
- Reviewed code submitted by team members. Documented the API interface using `swagger` and achieved 99% code coverage.

National University of Singapore   *Singapore*

Teaching Assistant for CS1101S (SICP), CS2100 (Computer Architecture), CS3210 (Parallel Programming)   *Aug 2018 - PRESENT*
- Teaching several groups of tutorial for undergraduate students, achieving feedback score of 4.4 out of 5.0 (above Faculty average).
- Preparing, proofreading and grading assessments used in the courses

Projects

Fluminus, Fluminurs *(http://github.com/indocomsoft/fluminus/, http://github.com/indocomsoft/fluminurs/)*   *Singapore*

Developer (Elixir, Rust)   *Jan 2019 - PRESENT*
- Reverse-engineered the API of NUS Learning Management System to provide CLI tool to download files.
- Wrote a Telegram Bot to send push notification when a new announcement is made on the NUS Learning Management System website.

Extracurricular Activity

NUS Hackers   *Singapore*

Coreteam Member   *Nov 2017 - PRESENT*
- Organising **Hacker Tools**, a series of events targeting Computing students how to make the most of tools that productive programmers use.
- Teaching JavaScript, HTML and CSS in **Hackerschool** workshops.
- Organising **Hack & Roll**, Singapore's largest student-run hackathon.
- Organised **Friday Hacks**, weekly Friday meetups which include one or two technical talks with speakers from the industry or academia.

NUS Student Union Committee for Information Technology   *Singapore*

Head of Technical Cell   *Aug 2017 - July 2019*
- Rewrote in Ruby on Rails the internal Co-Curricular Activity website used to track supervising duties from existing the PHP system.

Awards

2018	**Honourable Mention,** Orbital (Project Gemini)	*Singapore*
2016	**Bronze Medallist,** Singapore 19th National Olympiad in Informatics	*Singapore*