

# Julius Putra Tanu Setiaji

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## Education

### National University of Singapore

BACHELOR OF COMPUTING (COMPUTER SCIENCE), HONOURS

- CAP (Cumulative Average Points): 4.79 out of 5.00 (3.83 out of 4.00)

Singapore

Aug 2017 - Dec 2020

## Technical Skills

### Experienced Languages

Scala, Elixir, C, Ruby, Python, Swift, TypeScript/JavaScript, Java, Shell, SQL,  $\LaTeX$ , HTML/CSS

### Familiar Languages

Rust, Erlang, Objective-C, C++, Haskell, PHP

### Frameworks

Apache Spark, UIKit, React, Phoenix, Ecto, Ruby on Rails, OpenMP, MPI

## Experience

### Stripe Inc.

Singapore

SOFTWARE ENGINEERING INTERN (GLOBAL APAC BANKING TEAM: RUBY, PROTO3)

May 2020 - July 2020

- Built **an integration with a new payment method** and decoupled my team's services so that they can be **deployed safely and independently**.
- **Saved the company up to hundreds of eng-hours/month** by speeding up scripts runtime along with contribution to Sorbet (<https://sorbet.org/>).

### Asana Inc.

San Francisco

SOFTWARE ENGINEERING INTERN (SECURITY TEAM: PYTHON, TYPESCRIPT/JAVASCRIPT, AWS)

January 2020 - April 2020

- Smoothly **ported over existing services to AWS Lambda** for more granular permissions and to run risky software on a separate infrastructure to mitigate potential impact of security breaches, including Asana's image thumbnailing, video snippet creation, and webhook services.
- Created **a data pipeline to easily query and audit logs** of engineers access to production machines.

### Stripe Inc.

San Francisco

SOFTWARE ENGINEERING INTERN (MACHINE LEARNING INFRASTRUCTURE TEAM: SCALA, SPARK, REACT, FLOW/JAVASCRIPT)

May 2019 - August 2019

- 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 (iOS TEAM: 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/app/id1423011730>)

### National University of Singapore

Singapore

TEACHING ASSISTANT

Aug 2018 - Apr 2020

- Prepared materials and taught tutorials for undergraduate students; clinched the award of Honour List of Student Tutors.
- Courses: CS1101S (SICP), CS2100 (Computer Architecture), CS3210 (Parallel Programming), CS3217 (Software Engineering, iOS Platform)

### 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 course management website for NUS CS1101S course
- Designed the overall architecture of the system, including the database schema and API with input from the front-end team.

## 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 a cross-platform CLI tool to download files from the site.

## Extracurricular Activity

### NUS Hackers (<https://nushackers.org>)

Singapore

CORETEAM MEMBER

Nov 2017 - PRESENT

- Pioneered **Hacker Tools**, a series of events targeting Computing students how to make the most of tools that productive programmers use.
- Organising **Hack & Roll**, Singapore's largest annual student-run hackathon.
- Organised **Friday Hacks**, weekly Friday meetups which include one or two technical talks with speakers from the industry or academia.

## Awards

2020 **Dean's List**, NUS School of Computing

Singapore

2019 **Category Winner**, NUS School of Computing 15th Term Project Showcase

Singapore

2018 **Honourable Mention**, Orbital (Project Gemini)

Singapore

2017 **Scholar**, ASEAN Undergraduate Merit Scholarship

Singapore

2016 **Bronze Medallist**, Singapore 19th National Olympiad in Informatics

Singapore