

# 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, Elixir, C, Ruby, Python, Swift, JavaScript, Java, Shell, SQL, PHP,  $\text{\LaTeX}$ , HTML/CSS

**Familiar Languages** Rust, Erlang, Objective-C, C++, Haskell

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

## Experience

### Asana Inc.

San Francisco

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

January 2020 - PRESENT

- Smoothly porting over Asana's image thumbnailing and video snippet creation service from webserver machine to AWS Lambda for more granular permissions to mitigate potential impact of security breaches
- Currently working on better user data compartmentalisation.

### Stripe Inc.

San Francisco

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

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/sg/app/chainsaw-logviewer/id1423011730>

### 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.
- 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.
- 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.

## Awards

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

Singapore

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

Singapore

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

Singapore

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

Singapore