# SUYASH SHEKHAR

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# **FDUCATION**

# NATIONAL UNIVERSITY OF SINGAPORE

BComp in Computer Science University Scholars Programme Expected April 2020 | Singapore

# SKILLS

### Experienced:

Java •Python •Swift HTML •CSS •iOS

Familiar:

Objective-C •Ruby Ruby on Rails •C Haskell •JavaScript SQL •Prolog

# **COURSEWORK**

Natural Language Processing Machine Learning Operating Systems Programming Language Theory Probability and Statistics Software Engineering

# **TEACHING**

Data Structures and Algorithms: Spring, 2018

Software Engineering: Fall. 2018

# AWARDS

2018 Best Project Award (iOS)

NUS Computing Project Showcase

2016 NUS Science and Tech Scholarship

7 Distinctions at GCF 'A' Levels

2012 A\*STAR India Youth
Scholarship (awarded to top 7 students in India)

2012 National Talent Search Scholarship

# **EXPERIENCE**

#### SEA (GARENA) | SOFTWARE ENGINEERING INTERN

May 2018 - August 2018 | Singapore

- Build an iOS Debugging SDK using Swift 4 and Objective-C.
- Used **Objective-C runtime** to monitor network latency.
- · Socket programming in Objective-C to monitor TCP/IP.
- Assembly and system calls to estimate CPU Frequency and RAM usage.
- Other notable features generating stack trace, view hierarchies, system configuration and resource consumption.
- The SDK is incorporated into all new iOS applications by the company.

#### TINKERBOX STUDIOS | SOFTWARE ENGINEERING INTERN

May 2017 - July 2017 | Singapore

- Improved, deployed and maintained an employee feedback system used by Grab and its over 2000 employees.
- Refactored the client management system and designed a mailer daemon to send real-time updates to customers.
- Used Ruby on Rails and HTML, CSS and CoffeeScript(JS)/jQuery.

# **PROJECTS**

#### **LUMOS** | SWIFT, OBJECTIVE-C RUNTIME

July 2018 - Present

- · A light Swift wrapper around Objective-C runtime methods.
- Provides a simple API for method/property swizzling and modifying methods, objects and classes at runtime.
- It is memory and type safe with Swift's strong type system.

#### **NUSLIB** | SWIFT

March 2018 - April 2018

- An iOS app which allows users to browse, search and reserve books from the NUS Libraries and track their borrowing history.
- · Provides an internal review and recommendation system.
- · Used Google Books & Goodreads API for book information and reviews.
- Other features include searching by ISBN barcodes and integration with Facebook and Twitter SDKs for sharing reading progress.

#### **SORTING HAT** | PYTHON

February 2018 - March 2018

- Used by the USP hostel office to allocate rooms to its **over 600 residents** .
- Modelled residents' preferences and administrators' constraints as a Satisfiability Modulo Theories problem and solved them using several smt solvers.
- Ran on multiple nodes in parallel for significant speed improvements.
- · Made using pysmt and z3-solver.

# **CLUBS**

#### **NUS HACKERS** | PRESIDENT

April 2017 - Present | NUS, Singapore

- A student group committed to spreading hacker culture and open source software in Singapore.
- Organised Hack&Roll 2018, the largest student-run hackathon in Singapore with over 450 participants and over 100 projects.
- Organised weekly technical meetups with speakers from the industry and academia. The club has organised 155 so far.
- Taught technical workshops on git, html & css, ios and linux.