

SUYASH SHEKHAR

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EDUCATION

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 • ReactJS

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**
- 2014 **7 Distinctions**
at GCE '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

- Built 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 | 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 & type safe and hence more secure than raw Objective-C.

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.