Mayank Keoliya

mayank@u.nus.edu | 8915-9172

EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE

Bachelors in Computing (Hons.)
Spl. Honors : University Scholars Programme
May 2023 | Singapore, SG
Cum. GPA : 4.95 / 5.0

DON BOSCO SCHOOL

Grad. May 2019 | Kolkata, India
School Leaving Grade (ISC) : 99 %
(All India Rank : 4)
School valedictorian

LINKS

Github:// **mkeoliya**
LinkedIn:// **mayankkeoliya**

COURSEWORK

UNDERGRADUATE

Data Structures and Algorithms
Programming Methodology
Computer Organisation
Discrete Structures

SKILLS

PROGRAMMING

Experienced in:
Java • Javascript/TypeScript
Familiar with:
Haskell • Python • Ruby
Frameworks:
ReactJS, Rails, and LAMP.

ACTIVITIES

NUS Hackers Coreteam

Singapore's most active student-run tech community. Organised weekly technical talks, workshops and an annual hackathon.

Debate/MUN

Represented NUS at the Princeton Diplomatic Invitational (2020). Secretary-General for a school-level conference.

EXPERIENCE

SEA | Software Engineering Intern

May 2021 - August 2021 | Singapore

- Developed an alerts triage system which enables different roles to respond to abnormal situations during payments and authentication across all of Garena's games
- Scaled the triage system to service alerts from over 2.4. billion requests per day (23k per second)
- Built a public status page for Garena's payments service, along with a custom-rolled subscription service
- Built an incident management dashboard (in VueJS and Django) for product managers to update the public status page

COMPUTING FOR VOLUNTARY WELFARE ORGANISATIONS | Software Engineering Intern

May 2020 - August 2020 | National University of Singapore

- Upgraded a client management system for **Senior Activity Centres** in Singapore for capturing client records and generating reports.
- Completely re-wrote the frontend in ReactJS, optimised loading times using backend pagination and caching.
- Refactored the back-end to use a RESTful API, improved filtering and aggregation queries.
- Built a registration module to allow users to register individual, or multiple clients based on certain conditions.
- The system is used by >300 staff to manage data for >10000 clients,and is based on a React frontend, and Rails backend.

PROJECTS

TIMETABLE GENERATOR | Java

- Project generates a timetable for a school based on specified constraints.
- Algorithm used involves greedy pre-processing (assigning a class to the least busy teacher), and then randomization.

STOCK EXCHANGE SIMULATOR | JavaScript • PHP

- Customizable stock simulator with graphs, charts, trading portal, cumulative stock index and a fixed deposit feature.
- Built in August 2018, for a school stock-exchange competition.
- Uses JavaScript and Ajax for displaying reactive charts, PHP for routing forms and data, and MySQL as an RDBMS.

TEACHING

NUS | Undergraduate TA • CS1101S

Aug 2020 - Present

- Conducting a tutorial class for 8 students for the introductory programming module (CS1101S) at NUS.
- Covering recursion, sorting algorithms, lazy evaluation, list processing, streams, and meta-circular evaluators, with an emphasis on functional programming.
- Responsible for creating teaching material, conducting a 2-hour weekly session, and grading student assignments.