RISHABH SINGHAL

Pre-Final year undergraduate student at IIIT Hyderabad

@ rishabh.singhal@research.iiit.ac.in ⚲ New Delhi, India
 rish-singhal   in linkedin.com/in/3rishsinghal   % rish-singhal.github.io/

EXPERIENCE

Undergraduate Researcher
Cognitive Science Lab, IIIT Hyderabad

📅 May 2019 – Ongoing ⚲ Hyderabad, India

- Working in the field of cognitive science with special focus on virtual reality and psychological disorders.
- Virtually presented a paper "Coping Strategies determines Pandemic Distress and Propensity to Depression" at ACCS7 2021.
- Co-authored a paper "Head-Movement Analysis of Affective 360 degree Scene Exploration" which is currently in review process at ICVR '21.

Software Engineering Intern
Carengrow

📅 August 2018 – November 2018 ⚲ Hyderabad, India

- Designed and developed a web application in **React** for identifying and inculcating behaviour changes in a person, or a group using timely reminder.

Organiser and Web Developer
Internet Health Hackathon 2019

📅 July 2019 – September 2019 ⚲ Hyderabad, India

- Lead a team of 50+ volunteers and managed the logistics of the event.
- Developed the **website** for the event using Bootstrap, HTML and CSS.

Teaching Assistant, IIIT Hyderabad

📅 August 2019 – Present ⚲ Hyderabad, India

- Algorithms and Operating Systems & Introduction to Coding Theory
- Probability and Statistics & Introduction to Information Security

PROJECTS

Extreme Tic-Tac-Toe : AI-Bot   Spring 2019
- A bot that plays a modified version of Tic-Tac-Toe implemented using **alpha-beta pruning, zobrist hashing and custom heuristics**.

Linux Shell: Mini Terminal   Monsoon 2018
- Bash like shell for Linux, with support for piping and redirection, written in C using system calls.

MUSee: Music Streaming Web App   Spring 2018
- Music streaming application similar to **Spotify** with features like playlist (public and private), search bar and authentication.
- Implemented using **Flask** as framework and **MySQL** as RDBMS.

Arcade Games in OpenGL   Spring 2019
- An immersive 3-D implementation of iconic From The Seas which supports multiple viewpoints.
- Implementations of Jetpack Joyride and Subway Surfer.

Slide Matcher   Spring 2019
- Match frames from a video lecture with actual presentation slide deck using SIFT based feature matching.

Blockchain based Battleship   Monsoon 2019
- An implementation of **Battleship** backed with Blockchain using **solidity** for smart contracts.
- Implemented multiplayer functionality using **Sockets**, with **React** for front-end and **Django** as a framework.

EDUCATION

B.TECH + MS (BY RESEARCH) IN COMPUTER SCIENCE
IIIT Hyderabad

📅 Expected Graduation: 2022

Cumulative GPA (Current): 9.32/10.0

ACHIEVEMENTS

- **Dean's List** Awardee (three times) for Academic Excellence: Top 5% of the batch
- **Kishore Vaigyanik Protsahan Yojana** scholar since 2015
- **JEE** got rank of 1551 among 1.2 million aspirants

Competitive Programming

- **Facebook Hacker Cup** (Qualification Round 2020) **ranked 199/32,000**
- **Google Hash Code** (Qualification Round 2020) ranked 2194.
- **Google Code Jam** qualified for Round 1 in 2018 & 2020.
- **Codeforces**
  Rating : **2058 [Candidate Master]**
  Ranked 81 among 15k participants in Div2 Round 658
- **Codechef** - Rating : **2114 [5 Stars]**

SKILLS

- **Programming Languages:** C, C++, Python
- **Web Frameworks:** React, Flask, NodeJs
- **Miscellaneous:** Latex, Matlab, SQL, OpenGL, Bash, Erlang, Git, Linux

COURSEWORK

- **CS -** Computer Programming, Data Structures and Algorithms, Blockchain, Operating Systems, Computer Networks, Data Systems, Graphics, Distributed Systems, Information Security
- **ML -** Artificial Intelligence, Statistical Methods in AI
- **Maths -** Linear Algebra, Number Theory, Automata Theory, Functional Analysis

EXTRACURRICULAR

- AAAI'21 Student Volunteer
- Technical Blogger - **RishBlogs**
- Member of Mozilla Telangana Group