# Divyanshu Kumar Singh

Department of Computer Science and Engineering, IIIT Delhi

Website: divyanshu-krs.github.io

### EDUCATION

### Indraprastha Institute of Information Technology Delhi

New Delhi, India

Email: divyanshu17048@iiitd.ac.in

Bachelor of Technology - Computer Science and Engineering; GPA: 7.18 (SGPA: 8.56) Aug 2017 - Present

Bachelor's Thesis: Understanding Social Support and Mental Well-Being Needs of LGBTQIA+ University Student's Advisor(s): Dr. Venkata Ratnadeep Suri, Dr. Jainendra Shukla

#### Publications

• Divyanshu Kumar Singh, Sumita Sharma, Jainendra Shukla, Grace Eden.: "Toy, Tutor, Peer, or Pet?: Preliminary Findings from Child-Robot Interactions in a Community School", In Companion of the 2020 ACM/IEEE International Conference on Human-Robot Interaction (Companion-HRI '20), Cambridge, UK, Mar-2020. [PDF] [Video]

- Divyanshu Kumar Singh, Venkata Ratnadeep Suri, Jainendra Shukla: "Design for the Well-Being of LGBTQIA+ University Students", (Lightly-Peer Reviewed, Workshop Paper) in From Needs to Strengths: Operationalizing an Assets-Based Design of Technology at ACM CSCW'2020, Oct-2020. [PDF]
- Divyanshu Kumar Singh, Manohar Kumar, Eduard Fosch Villaronga, Deepa Singh, Jainendra Shukla: "Ethical Considerations Arising from the Contextualization of Child-Robot Interactions in Under-Resource Communities" in the International Journal of Social Robotics. (Journal Article, Under Review)

#### Research Projects

• Ethics in Child-Robot Interaction: I analyzed the Child-Robot Interaction Videos to qualitatively code emerging ethical issues from my previous user-study with kindergarten children. After coding, we wrote philosophical and technical arguments to highlight the need for ethical guidelines in under-resourced communities. (Oct 2020 - Present)

Team Member: Deepa Singh (PhD Scholar, Delhi University)

Advisor: Eduard Fosch-Villaronga, Dr. Jainendra Shukla, Dr. Manohar Kumar

Online Schooling During COVID Era: Interview study with teachers, students and parents of different schools in Delhi including both private and government to understand how exactly is online learning playing out for them. I recruited and interviewed teachers, students and parents from Delhi govt. schools. Translated, transcribed and then coded the interview. (Jun 2020 - Dec 2020)

Team Member: Angel Walia (Undergrad IIIT Delhi)

Advisor: Dr. Grace Eden

• A Survey on Perception of Adults with Autism: The aim of the project is to conduct a survey/interview to obtain the perception of adults with Autism Spectrum Disorder (ASD) in relation to the therapies and/or the interventions they received and their view and suggestions on the use of social robots for robot-assisted interventions for the cognitive well-being of the children with ASD. (Project on Halt Due to COVID) (Jul 2019 - Present)

Advisor: Dr. Jessica Korte, Dr. Jainendra Shukla, Prof. Anubha Gupta

## Work Experience

### IIIT Delhi

Summer Research Intern — Advisor: Dr. Anuj Grover

May 2020 - Jul 2020

o Studied TRIZ (Theory of Inventive Problem Solving) in various use cases and prepared an engineering course curriculum. Individually explored a Child-Robot Interaction scenario as a problem and applied TRIZ.

#### Human-Machine Interaction Lab - IIIT Delhi

Undergraduate Researcher — Advisor: Dr. Jainendra Shukla

Jul 2019 - Present

- Studying Human-Robot Interaction and Affective Computing (Building and Studying Machine Learning Model)
- Worked with variety of population during user studies and conducted interaction/experiments with at least 60-70 people.
- o Research Methods: Interviews, Survey, Data Analysis(Quantitative & Qualitative), Focus-Group.
- o Developed the Lab Website Currently Managing the website.

#### Summer Camp 2019 - IIIT Delhi

Coordinator — Supervisior: Ms. Sheetu Ahuja

Feb 2019 - Jun 2019

- o In 2019, 180 students from 7 different Delhi govt. school attended the summer camp.
- o Designed curriculum for 'Hands on Science' module along with team of volunteers for 5 weeks of study for students of class 8 and 9; and ensuring proper execution of the camp.

### Teaching Experience

### IIIT Delhi

Teaching Assistant — Introduction to Human-Computer Interaction

Jan 2021 - Present

- o Instructor: Dr. Rajiv Ratn Shah. Introductory course for 282 first year students.
- Conducting & preparing tutorial session. Mentoring a group of 42 students.
- Preparing quizzes and exams with rubric followed by grading the same.

#### Position of Responsibilty

### Coordinator ASTRONUTS - Astronomy Club of IIIT Delhi

Conducted Sky-Observation and in-class session on Astronomy.

Aug 2018 - Jul 2019

### Professional Services

#### Shadow Program Committee

COMPASS'21

#### Peer-Reviewer

• LBR/LBW — HRI'20, CHI'21

#### Sub-Reviewer

• ICSR'20 Workshop (Child-Robot Interaction: Present and Future Relationships)

### Honors and Awards

- Selected for SIGCHI CSCW Asia Winter School 2020 (Dec 18-19) Amongst 50 Student Selected from Asia-Pacific Region
- Selected for Mentor-Mentee Program at Workshop on Interactive System in Health 2020 (AMIA'20): Matched with Dr. Oliver L. Haimson (Univ. of Michigan) and Awarded Scholarship to attend the conference.
- Most Innovative Project Annual Inter Delhi Public School Science Fair
- Runner Up District Level Basketball Championship (Jhajjar, Haryana)

#### Volunteering

- Student Volunteer for ACM/IEEE HRI'20: Among 20 selected out of 103 applicants
- Volunteer for Roshini: Diwali Book Donation Drive 2019 for Govt. School Students
- Volunteer for event Procon Jr. at ESYA'2017 Annual Technical Festival of IIIT Delhi