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: 7.4 (SGPA: 9.2)

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 Reviewed, Workshop Paper) in From Needs to Strengths: Operationalizing an Assets- Based Design of Technology at ACM CSCW'2020, Oct-2020. [PDF]

Research Projects

• Education & Technology in Disruption: The aim of the project is to conduct interviews with parents, students, teachers and an NGO to understand their technology use and non-use for education in Kashmir. We are specifically investigating the resiliency, aspirations and assets in the community which have faced long technological and social disruption in Kashmir, India. (March 2021 - Present)

Team Member: Asra Sakeen Wani (PhD Scholar, IIIT Delhi)

Advisor: Dr. Pushpendra Singh

• Design for the Well-Being of LGBTQIA+ University Students: Interview study to understand social, emotional and mental support resources/ties available to emerging LGBTQ+ adults in India and what different role technology play at each stage in life. We also look at Rural-urban tech use and non-use. Design and conducted 30+ interviews with participants from across India. Currently, qualitatively coding and analyzing the data. (Aug 2020 - Present)

Advisor: Dr. Venkata Ratnadeep Suri, Dr. Jainendra Shukla, Dr. Gopinaath Kannabiran

• Ethics of Child-Robot Interaction in Under-resourced Context: Analyzing the Child-Robot Interaction Videos to qualitatively code emerging ethical issues from our previous user-study with kindergarten children in a community school. We engaged in philosophical and technical arguments to highlight the urgent need for ethical guidelines to deploy social robot for children in under-resourced communities.

Article is currently under review at International Journal of Social Robotics. (Oct 2020 - Feb 2021)

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

Advisor: Dr. 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 - Sep 2020)

Team Member: Angel Walia (Undergrad IIIT Delhi)

Advisor: Dr. Grace Eden

• Social Robots for Primary Education: Deployed a social robot at a community school in New Delhi. Interactions of Kindergarten students with the robot during a language learning task were analyzed over a period of a month. Scheduled, organized and conducted the field study and user study. Work presented as poster at ACM HRI'2020. (Jul 2019 - Dec 2019) Advisor: Dr. Sumita Sharma, Dr. Jainendra Shukla, Dr. Grace Eden

Work Experience

Scry Analytics

 $Software\ Engineer$

Jun 2021 - Present

• Working in Data Science team on the flagship product Collatio.

IIIT Delhi

Summer Research Intern — Advisor: Dr. Anuj Grover

 $May\ 2020$ - $Jul\ 2020$

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

- $\circ \ \ Studying \ Human-Robot \ Interaction \ and \ Affective \ Computing \ (Building \ and \ Studying \ Machine \ Learning \ Model)$
- 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

- $\circ\,$ In 2019, 180 students from 7 different Delhi govt. school attended the summer camp.
- 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 - Apr 2021

- o Instructor: Dr. Rajiv Ratn Shah. Introductory course for 282 first year students.
- Conducting & preparing tutorial session. Mentoring a group of 42 students.
- o Prepared quizzes, exams and projects 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

Program Committee

• COMPASS'21 (Shadow & Posters)

Peer-Reviewer

* LBR/LBW — HRI'20, CHI'21, CSCW'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