# Divyanshu Kumar Singh

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## **Expertise**

Research Interest: Human-Computer Interaction (HCI), Communities, Intersections, Marginality, Identity & Culture, Justice, Infrastructure, ICTs & Social Media.

Research Methods: interviews, focus-groups, ethnographic field studies, survey, thematic analysis, statistical analysis, hypothesis testing.

### Education

July 2017 - Indraprastha Institute of Information Technology Delhi (IIIT Delhi)

July 2021 B.Tech in Computer Science and Engineering

Advisor(s): Dr. Venkata Ratnadeep Suri, Dr. Jainendra Shukla

Thesis: Understanding the Digital Technology Use Amongst LGBTQ+ Adults in

India for Well-Being

CGPA: 7.4

### **Publications**

[C.1] Kumar Singh, D., Sharma, S., Shukla, J., & Eden, G. (2020, March). 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 (pp. 325-327). [PDF] [Video]

[W.1] Divyanshu Kumar Singh, Venkata Ratnadeep Suri, Jainendra Shukla. 2020. 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]

[C.2] Asra Sakeen Wani, **Divyanshu Kumar Singh**, Pushpendra Singh. "Hartal (Strike) Happens Here Everyday": Understanding Impact of Disruption on Education in Kashmir. (Conditionally Accepted to CHI 2022, Conditional Acceptance Rate: 12.5%)

[J.1] Divyanshu Kumar Singh, Manohar Kumar, Eduard Fosch-Villaronga, Deepa Singh, Jainendra Shukla. Ethical Considerations From Child-Robot Interaction in Under-Resourced Communities. (Under review)

[C.x]=Conference, [J.x]=Journal, [W.x]=Workshop

# Research Experience/Projects

September 2020 -

Digital Technology Use Amongst LGBTQ+ Adults in India

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

- Understanding tech (mobile, social media, internet, mobile apps) use and non-use by queer adults for their well-being in India. [W.1]
- Reached out to queer collectives, conducted in-depth interviews, thematic analysis

• Currently analysing the data. To be submitted at CSCW.

# March 2021 - Student Researcher - Mélange Lab, IIIT Delhi present Advisor: Dr. Pushpendra Singh

- Language Inclusivity in SIGCHI (Apr'21 present)
  - Understanding role of language in writing, presenting and accessing research articles by non-native english speakers in HCI
  - conducting survey, interviews, thematic analysis
  - Collaboration: Dr. Sumita Sharma
- Education, Technology and Disruption in Kashmir (Mar'21 Sep'21)
  - Understanding impact of disruption/conflict on education access, tech use in Kashmir [C.2]
  - thematic analysis of interview, brainstorming implications
  - Collaboration: Asra Sakeen Wani (PhD Scholar, IIIT Delhi)

#### July 2019 - Undergra September 2021 IIIT Delhi

# Undergraduate Student Researcher - Human-Machine Interaction Lab, IIIT Delhi

Advisor: Dr. Jainendra Shukla

- Ethics of CRI in Under-Resourced Communities (Oct'20 Feb'21)
  - Understanding ethical issues arising from deploying social robots for education in under-resourced communities [J.1] (Revised & Resubmitted (September))
  - Thematic & interaction analysis of video and interviews
  - Collaboration: Deepa Singh (PhD Scholar, Delhi University), Dr. Manohar Kumar, Dr. Eduard Fosch-Villaronga
- Social Robot for Primary Education (Jul'19 Jan'20)
  - 5-week Child-Robot Interaction (CRI) study for language learning tasks with Kindergarten students at a community school [C.1]
  - moderated CRI sessions, analyzed videos, interviews & field notes
  - Collaboration: Dr. Sumita Sharma, Dr. Grace Eden

# June 2020 -

#### June 2020 - Online Schooling During COVID Era

September 2020 Advisor: Dr. Grace Eden

- Recruited students, teachers and parents from three Delhi Govt. school to understand impact of COVID on education
- Conducted in-depth interview, translation and transcription.

## Work/Industry Experience

June 2021 - Scry Analytics

present Software Engineer (Data Science)

- Working in the Data Science team on flagship document digitisation product Collatio.
- Machine Learning optimisation tests, Refining pipeline logic, Incorporating new documents.
- Tech & Frameworks: Python, Docker, Bash, MongoDB, Selenium.

May 2020 - IIIT Delhi

July 2020 Summer Intern (Advisor: Dr. Anuj Grover)

 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.

March 2019 - IIIT Delhi

June 2019 Coordinator | Summer Camp 2019

- In 2019, 180 students from 7 different Delhi govt. school attended the summer camp.
- Designed curriculum for 'Hands on Science' module along with a team of 32 volunteers for 5 weeks of study for students of class 8 and 9; and ensuring proper execution of the camp.

### **Teaching Experience**

Spring 2021 Teaching Assistant, IIIT Delhi

DES 101: Introduction to Human-Computer Interaction\*

- Instructor: Dr. Rajiv Ratn Shah
- Introductory course for 282 first year undergraduates...
- Conducting & preparing weekly tutorial sessions. Mentored group of 42 students and 10 projects.
- Prepared and graded quizzes, exams and projects with rubric.

### **Position of Responsibility**

Coordinator (Head) ASTRONUTS: Astronomy Club of IIIT Delhi (Aug'18 - July'19)

- Conducted Sky-Observation and in-class session on Astronomy
- Organized field trip to Sariska Astroport

### **Professional Service**

Shadow PC - Compass 2021

Peer-Reviewer (LBR) - HRI'20, CHI'21, CSCW'21, Compass'21

Sub-Reviewer - ICSR'20 Workshop (Child-Robot Interaction: Present and Future Relation-

ships)

## Volunteering

Student Volunteer - ACM HRI'20

Community Service - Volunteer for Roshini: Diwali Book Donation Drive 2019 for Govt. School

Students in Delhi

<sup>\*</sup>Due to some errors by the academics department at IIIT Delhi my transcript reflects my TA credits for a different course. I have requested for a corrected transcript which will be available soon.