Divyanshu Kumar Singh

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EDUCATION

- **Indraprastha Institute of Information Technology Delhi** — New Delhi, India
  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]*

RESEARCH PROJECTS

- **Ethics in Child-Robot Interaction**: Studying Child-Robot Interaction in Global South, India and proposing a framework of ethics to conduct such studies. I am analyzing interaction video from our work in HRI'20, to code possible ethical issues that could emerge. (*Oct 2020 - Present*)
  Team Member: Deepa Singh (PhD Scholar, Delhi University)
  Advisor: 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

- **Predicting Anxiety in Adults using EDA and HRV Signals**: Developing a Machine Learning(ML) model using both EDA& HRV signals, to predict anxiety in adults. Novelty of this works lies in the fact that there are no pre-existing model in ML which uses these two modalities to deduce anxiety and its correlation with STAI Questionnaire. (*Jan 2020 - Present*)
  Team Members: Pramil Panjawani (PhD Scholar IIIT Delhi), Shubhangi Butta (Undergrad IIIT Delhi)
  Advisor: Dr. Jainendra Shukla, Dr. Mrinmoy Chakrabarty

- **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. (*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*
  - 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.
  - Research Methods: Interviews, Survey, Data Analysis(Quantitative & Qualitative), Focus-Group.
  - Developed the Lab Website - Currently Managing the website.

- **Summer Camp 2019 - IIIT Delhi**
  Coordinator — Supervisior: Ms. Sheetu Ahuja — *Feb 2019 - Jun 2019*
  - 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 - Present*
  - Instructor: Dr. Rajiv Ratn Shah. Introductory course for 282 first year students.
  - Conducting & preparing tutorial session. Mentoring a group of 42 students. Grading assignment & quizzes.

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

- **Peer-Reviewer**
  ACM/IEEE HRI'20(LBR)

- **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