

# Sruti Bhattacharjee

Email: srutibh2020@gmail.com | Portfolio: <https://srutibh.github.io/>

I am a graduate student in media technology at KTH Royal Institute of Technology. I have a combined skillset of user experience researcher, design researcher, and computer engineer which helps me become a potential communicator between different teams. Currently, I am interested in UX Research, Design Thinking, VR/AR, and HCI in general. Besides, I am also interested to explore strategic marketing and consultancy. I am a visual thinker and I believe in empathy for problem-solving.

## Education

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### École Polytechnique Fédérale de Lausanne (EPFL)

MSc Exchange in Computer Science

Lab Affiliation- Immersive Interaction Group (IIG),  
Computer-Human Interaction in Learning and Instruction

### KTH Royal Institute of Technology

MSc in Interactive Media Technology  
Specialization in Visual Computing

### Indian Institute of Technology Kharagpur

Bachelor Thesis at Department of Computer Science and Engineering  
Thesis- Counterfeit IC Detection using Image Processing Techniques

### West Bengal University of Technology

BTech in Information Technology

## Experience

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### R&D Intern, Ericsson Research, Stockholm

*Effect of Latency on Haptic Perception in Haptic Teleoperation System*

Designed experiment, user journey, implemented prototype for experiment, used A/B testing for data collection, reported critical analysis of the experiment design

### Research Assistant, KTH Royal Institute of Technology

Research Assistant- Image annotation app development for cancer cell detection

### Teaching Assistant, KTH Royal Institute of Technology

Visualization (MSc) and Python Programming (BSc)

### Research Assistant, IIT Kharagpur

DeepFakeFace detection based on muscle motion and interframe difference

### Research Assistant, IIT Kanpur

Musical script generation from Harmonium playing video using HandTrack and perspective transformation

**Visiting Faculty, NSHM Knowledge Campus, Kolkata**

Supervisor for BSc course "Computer Graphics with OpenGL and C++"

## **Selected Projects**

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### **Case Study: Video Call vs VR vs Teleoperation Robot in Group Communication**

Designed and conducted semi-structured user Study and analysed data used mixed method to understand which platform is most suitable for independent thinking

### **Case Study: Emotion Perception in Realistic Face vs Avatar Facial Expression**

Designed prototype for experiment and conducted structured user study and analysed data using quantitative methods

### **Facial Expression Detection in Virtual Reality using Machine Learning Techniques**

Designed and implemented data collection prototype and collected data using structured user study, analysed model detection accuracy using quantitative methods

### **To Protest- Augmented City Project**

Designed an app to enable sustainable protest, collaboration and artistic creation in the city Lausanne. Went through rapid design thinking, storyboarding and Wish vs Guilty analysis

### **Emotion Perception from Gaze Detection**

Verified Shared Signal Hypothesis by computer vision methods. Developed model to detect Approach-oriented and avoidance-oriented emotions based on direct and averted gaze

## **Volunteer Experience**

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Volunteer- **HackZürich, Zürich, Switzerland**

Academic Team and Podcast Host- **KTH AI Society, Sweden**

Public Relationship Manager- **SPIC MACAY, IIT Kanpur, India**

Zonal Head- **TechKriti-17, IIT Kanpur**

Campus Representative- **Abhyuday-17, IIT Bombay**

Student Contributor- **Mozilla Firefox, Kolkata Chapter**

## **Accomplishments**

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Erasmus Plus

KTH Opportunity Fund

Swiss Programme for Erasmus Plus (SEMP)