

# Divyanshu Tiwari

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## EDUCATION

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**IIT Roorkee, India**

*Bachelors in Architecture*

2017 - 2022

CGPA: 7.2/10

## PUBLICATIONS

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- [P.1] Abhishek Rathod, Ajay N, Aman Jaiswal, Divyanshu Tiwari, Surya Prakash G. **Coodle: A Low-Cost Tangible Programming System for Kids from Low-Income Households in India.** *In Proceedings of the 12th Indian Conference on Human-Computer Interaction (IndiaHCI '21)* [Conditionally Accepted]
- [E.1] Divyanshu Tiwari. **Fostering Collaboration and Empathy Through Games.** *Extended Abstracts of the 2020 Annual Symposium on Computer-Human Interaction in Play (CHI PLAY 20 EA)*. [[Paper](#)]

[P.x] = Poster, [E.x] = Extended Abstract

## RESEARCH EXPERIENCE

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**Creativity Lab**

*UC San Diego*

June 2021 - Present

*Prof. Haijun Xia*

- Working under the guidance of Prof. Haijun Xia on the development of a declarative grammar in JSON through which one can create customized array animations to illustrate a range of varied transformations on arrays.

**Psychology Lab**

*IIT Roorkee*

Nov 2020 - April 2021

*Prof. Manish Kumar Asthana*

- Responsible for developing a number of interactive virtual environments on Unity and Vizard 7. These were used to collect behavioural data of users by testing them on particular tasks.
- Analysed the participant's behavioural data thus collected to gain insights into their behaviour.

**Net Zed Lab**

*IIT Roorkee*

Nov 2018 - Dec 2018

*Prof. Elangovan Rajasekar*

- Built a prototype that automated the functioning of an AC controller. It helped in maintaining the AC at a temperature optimised for human comfort and energy efficiency.

## PROFESSIONAL EXPERIENCE

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**Razorpay** [[Article](#)] [[Wireframes](#)]

*Full-Stack Designer*

May 2019 - July 2019

- Worked on the design and development of an interactive section for the company's website. It helped their customers (mainly other businesses) in understanding their needs and recommended product solutions accordingly.

## ACHIEVEMENTS

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- 2021** Awarded **Professional Development and Innovation Award** for our work on **Coodle**, given to senior undergraduate students for innovative capstone engineering projects.
- 2021** Received full scholarship of \$800 to join the **Experiments in AI-Generated Media**, an online course organized by **MIT Media Lab**.
- 2021** Invited to **KU Leuven** as a **visiting scholar** at the E-Media Lab.
- 2020** National finalists in **Innovate for an Accessible India Challenge** organised by NASSCOM Foundation and Microsoft India. Selected among the top 50 finalists nationwide out of 3400 applications.
- 2020** Finalist in **CHI PLAY 2020 Student Game Design Competition**.
- 2020** Selected for **MIT India Initiative**, a joint workshop by MIT and Harvard on Design, Technology and Social Innovation. I was among the 300 participants who were chosen nationwide out of the received 5000 applications.
- 2020** National finalists in **Smart India Hackathon 2020**, which is a nationwide college level hackathon organised by the Government of India.
- 2018** National Winner of the **DesTech Challenge 2018** organized by NASA India.
- 2018** Winner of **Syntax Error**, an intra-college hackathon organized by SDS Labs at IIT Roorkee

## SELF PROJECTS

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- Coodle** [\[Article\]](#) [\[Code\]](#) February 2020 - August 2020
  - Built a tangible programming environment in a team of 5 that made use of physical cardboard blocks to write programs. The project aimed to provide rural children with an accessible tool to learn programming.
  - Responsible for designing the cards, the language syntax and for developing the front-end interface of the web application.
- Urban Trail** [\[Article\]](#) [\[Wireframes\]](#) November 2018 - December 2018
  - Designed a digital platform where users can capture their local urban journeys through their smart-phones. This can then later be analysed and shared with others to draw out meaningful insights from the captured data.
- Static Site Generator** [\[Article\]](#) [\[Wireframes\]](#) September 2018 - December 2018
  - Designed a web application that allows one to create simple static websites consisting of text and images. This project aimed to help our college professors to make conference websites for themselves without any external aid.
- Flappy Rockets** [\[Article\]](#) [\[Code\]](#) May 2018 - June 2018
  - Built a single-player game that made use of a miniature physical spacecraft to be used as its controller.
  - To gain points you are required to dodge incoming asteroids on the screen by moving the physical spacecraft up and down.

## EXTRA-CURRICULAR

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- Head of Design Innovation** July 2020 - July 2021  
*Information Management Group, IIT Roorkee*
  - Information Management Group is responsible for developing applications for IIT Roorkee making life a bit easier for its people in college. Here I handled the design decisions related to various applications that are under development and mentored junior designers of the group in their projects.

## **Student Volunteer**

*CHI PLAY 2020, TEI 2021*

### **TOOLS**

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<b>Programming</b>	C++, C#, Javascript, Python, Git
<b>Web Development</b>	HTML, CSS, Javascript, Node.js, Express.js, React.js
<b>Creative Programming</b>	Processing, p5.js, Three.js
<b>Creative Software</b>	Unity 3D, Vizard, Blender, Rhino, Grasshopper
<b>Design</b>	Photoshop, Illustrator, Premier Pro, Fusion 360, 3D Printing (Ender3)
<b>Physical Programming</b>	Arduino, Raspberry Pi