Divyanshu Tiwari

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EDUCATION

IIT Roorkee, India

Bachelors in Architecture

2017 - 2022

CGPA: 7.2/10

PUBLICATIONS

- [P.1] Abhishek Rathod, Ajay N, Aman Jaiswal, <u>Divyanshu Tiwari</u>, 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)

 [Accepted]
- [E.1] <u>Divyanshu Tiwari</u>. 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

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

Nov 2018 - Dec 2018

IIT Roorkee

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

Razorpay [Article] [Wireframes]

May 2019 - July 2019

Full-Stack Designer

• 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

- 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

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 smartphones. 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

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

Programming C++, C#, Javascript, Python, Git

Web Development HTML, CSS, Javascript, Node.js, Express.js, React.js

Creative Programming Processing, p5.js, Three.js

Creative Software Unity 3D, Vizard, Blender, Rhino, Grasshopper

Design Photoshop, Illustrator, Premier Pro, Fusion 360, 3D Printing (Ender3)

Physical Programming Arduino, Raspberry Pi