ISHAN BAWNE

BS-PHYSICS | Indian Institute of Technology, Kanpur

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EDUCATION

Indian Institute of Technology, Kanpur
Undergraduate | BS PHY
💼 2020 - Present   📍 Kanpur, India

Kendriya Vidyalaya No.2 Raipur
XII, CBSE
💼 2020   📍 Raipur, India

Kendriya Vidyalaya No.2 Raipur
X, CBSE
💼 2018   📍 Raipur, India

WORK EXPERIENCE

Internship, CreativeFuel Pvt. Ltd.
Development and Automation   *August 2021 - September 2021*
- The project was at the intersection of domains procedural generation, **GLSL shaders**, and automation.
- Modified an **open source tool** that can generate different types of animated planets in pixel art style.
- Made relevant changes in the project to **increase the resolution** of the exported gifs and write GLSL shaders to add more types of planets.
- **Automated** the whole process of variation of parameters and exported the planets in huge numbers on the conditions to the different types of planets while keeping a record of the kinds of planets and their specific parameters.

POSITIONS OF RESPONSIBILITY

Leader, Game Development Society
Science and Technology Council, IITK   *May 2022-Present*
- Organized and mentored **three SnT Summer Projects 2022** for **25+** Students. **Introduction to Graphics and Shaders, Introduction to Game Development,** and **Introduction to 3D Art and Rendering**
- Conducted **workshop on Programming Game Mechanics** which provided hands on experience to participants about coding and thinking how game mechanics works.
- Conducted **workshop on Procedural Generation** in which participants were taught how they can write shaders in GLSL shading language. The participants were exposed to topics like Perlin noise and Graphics rendering,
- Submitted art-works to a weekly social media campaign **"Render Monday"**, with a **reach of 2.5K+**, aimed to popularize digital artworks in the campus community.

Senior Member, Team Vision
Science and Technology Council, IITK   *2022-Present*
- Assisted the team heads in managing the team.
- **Led recruitment** of first-year students from a pool **of 120+ entries** into the team
- Mentoring junior team members to participate in prestigious **robotics and autonomous navigation competitions**.

Student Guide
Counselling Service,IITK   *2021*
- Guided and **mentored 6 freshmen** students in acclimatizing to the Environment of the Institute.
- Helped them with their academics by arranging meetings with their mentors and still maintain a good rapport with them.

PROJECTS

Advanced Game Development
Game Development Society IIT Kanpur (Studio Centauri)   *July 2021*
- Submitted a **playable game** as a recruitment task made with **Godot Engine**.
- Brainstormed ideas for the final game project and then designed the **game mechanics** and other game design elements, finalized timeline for the remaining project duration.
- Implemented the game design and made a **3D shooter game using Unity Engine**, working as programmer and game designer in a team of 5 members.

Cross Validated
Stamatics IIT Kanpur   *June 2021*
- Learned about fundamentals of statistics and algorithms like **MLE** and **Derivative methods** and exposed to techniques like **Regression, Sampling**, and **Bayesian Inference**.
- As an application, we were tasked to fit the **Bernoulli distribution** model to given data set using the **Maximum Likelihood Estimator** method and to predict results from the model.

Canteen Order Automation System
Course Project CS253   *January - April 2022*
- The project aimed to develop a **central** canteen automation system for all the canteens across the campus, through which we would be easing canteen management for canteen managers and **ordering food**, and **keeping track of their expenses** for students.
- Developed **separate portals** for canteen managers and students and an **accounting system** so students can pay all the canteen bills once a month.
- Developed the website with **Django Framework**, where I was tasked to build the website's backend.

Graphing Terminal
Self Project   *July 2021*
- A tool that can plot any **2d parametric curve** in a terminal using ASCII characters. The tool also allows users to **navigate** in coordinate space and perform operations like **zoom, scale** and **translate** using the command-line interface.
- Wrote the tool in the **C** programming language without any external libraries.

Mentos Mookit
Self Project   *September 2021*
- Redesigned the **User Interface** of the website serving course material "**Mookit**" in dark mode and added **additional features** to the website like a drawing pad to scribble.
- Implemented the design and features by writing custom CSS and **Javascript** files and enforcing them using browser extensions.

SKILLS

C, C++, C#, Python, Javascript, GDScript, CSS, HTML

Git, Linux, Bash, LaTeX, Unity Engine, Godot

NodeJS, ExpressJS, React, Flask, Django, ROS

EXTRA CURRICULARS

- Represented **Chhattisgarh State** in the **Sub Junior National Football Championship** organised by **All India Football Federation**.
- Represented KVS Raipur Region in **Regional and National Football Championships**.
- Served as a scout and received **RAJYAPURASKAR** Award for social service.