



Progress Report:
Md. Shakil Anower Samrat's
Tenure at DhumketuX
(2022–2024)

Presented By :
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About Us

DhumketuX is a creative and technology-driven initiative built with the vision of transforming ideas into impactful digital solutions. Since its inception, the team has focused on exploring emerging technologies, developing innovative products, and nurturing a culture of experimentation and learning.



The platform has also served as a space for collaboration and mentorship, where aspiring creators learn by doing and contribute to real-world projects. Through its two-year journey, DhumketuX has become more than a development team, it has evolved into a community of thinkers, builders, and dreamers working toward shaping the future of digital innovation in Bangladesh.

About Samrat

I am **Md. Shakil Anower Samrat**, a passionate software developer, researcher, and innovator dedicated to bridging creativity with technology. During my two-year journey at **DhumketuX** (from **1 February 2022** to **31 January 2024**), I worked to advance Bangladesh's space research and rocket development initiatives alongside a brilliant and inspiring team.

At DhumketuX, I was part of the software division, where I contributed to developing the **DhumketuX Operating System** and designed the front end of the **Rocket Engine Monitoring System** in Unreal Engine. These projects involved real-time simulation, data visualization, and system diagnostics, essential components that supported our engineering and research workflow.

My time at DhumketuX was more than a job; it was a journey of collaboration, learning, and discovery. Working under the leadership of **Nahiyan Al Rahman Oli**, our CEO, I gained valuable experience that strengthened my technical foundation and shaped my ambitions for the future.

In 2022, I founded **Softsasi**, a software development company focused on delivering high-quality, affordable, and innovative solutions across various domains. Softsasi reflects my belief that technology, when guided by creativity and purpose, can empower people and transform communities.

Beyond my technical work, I serve as the **Convener** of **BASIS Students' Forum Mymensingh Engineering College Chapter** and as the **Community Leader** of **Unreal Engine Bangladesh**. Through these roles, I have led and organized **hackathons**, such as Devsphere hackathon 2025, innovation programs, and tech events to inspire the next generation of developers and creators.

Driven by curiosity and vision, I continue exploring the fields of artificial intelligence, simulation, and digital innovation to build impactful projects that shape the future of technology in Bangladesh.

Samrat's Works at DhumketuX (2022–2024)

1. DhumketuX Operating System

Role: Software Developer

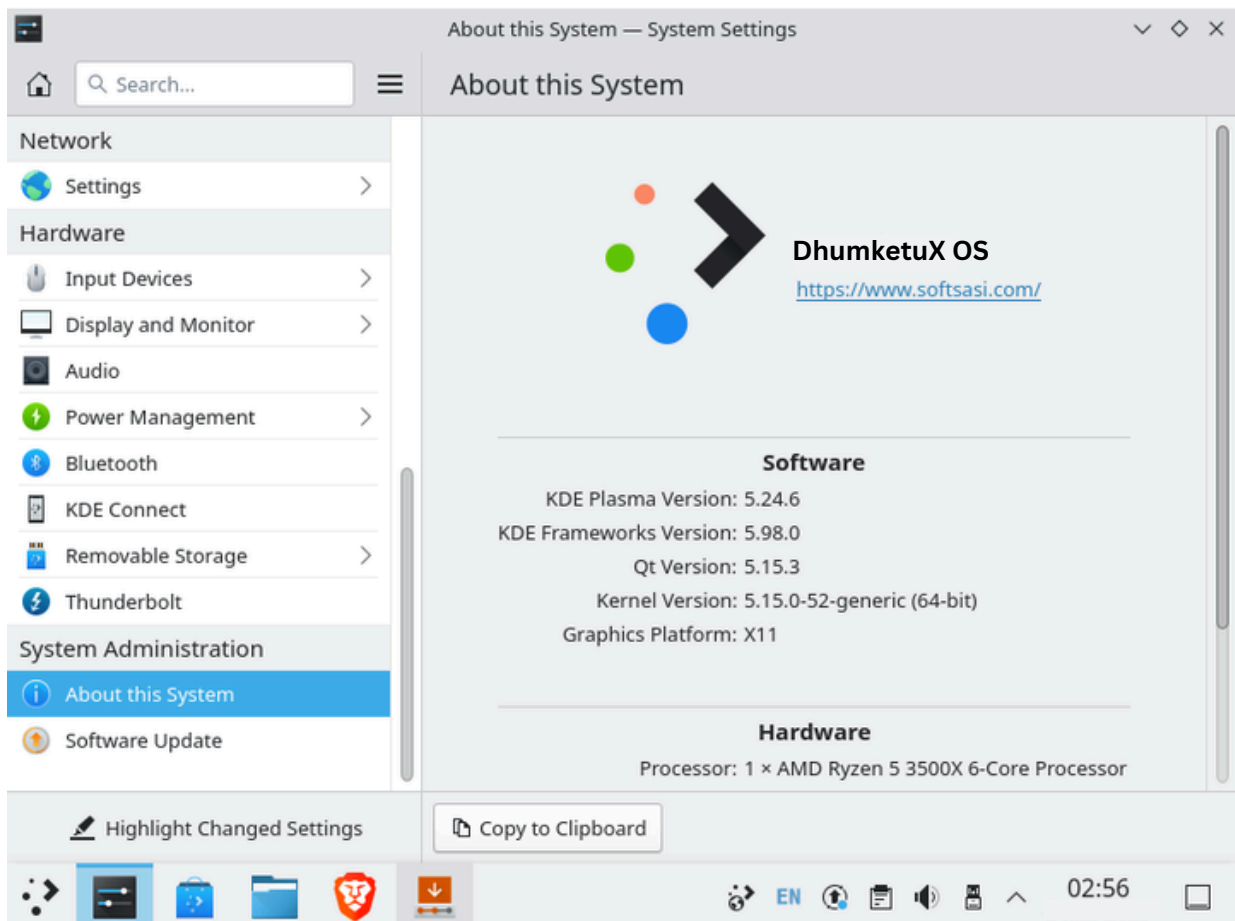
Timeline: March 2022 – September 2022

Description:

Samrat contributed to building the DhumketuX Operating System, an internal software platform designed to manage system processes and support the research team's experimental workflows.

Key Contributions:

- Designed and implemented core interface modules for the system
- Developed efficient UI layouts for smooth user interaction
- Ensured modular design for scalability in later research applications
- Impact:
 - The project streamlined internal software operations and created a stable foundation for future research tools at DhumketuX.



DhumketuX OS About System Section

Samrat's Works at DhumketuX (2022–2024)

2. Rocket Engine Monitoring System (REMS) – Front-End Development

Role: Front-End Developer (Unreal Engine)

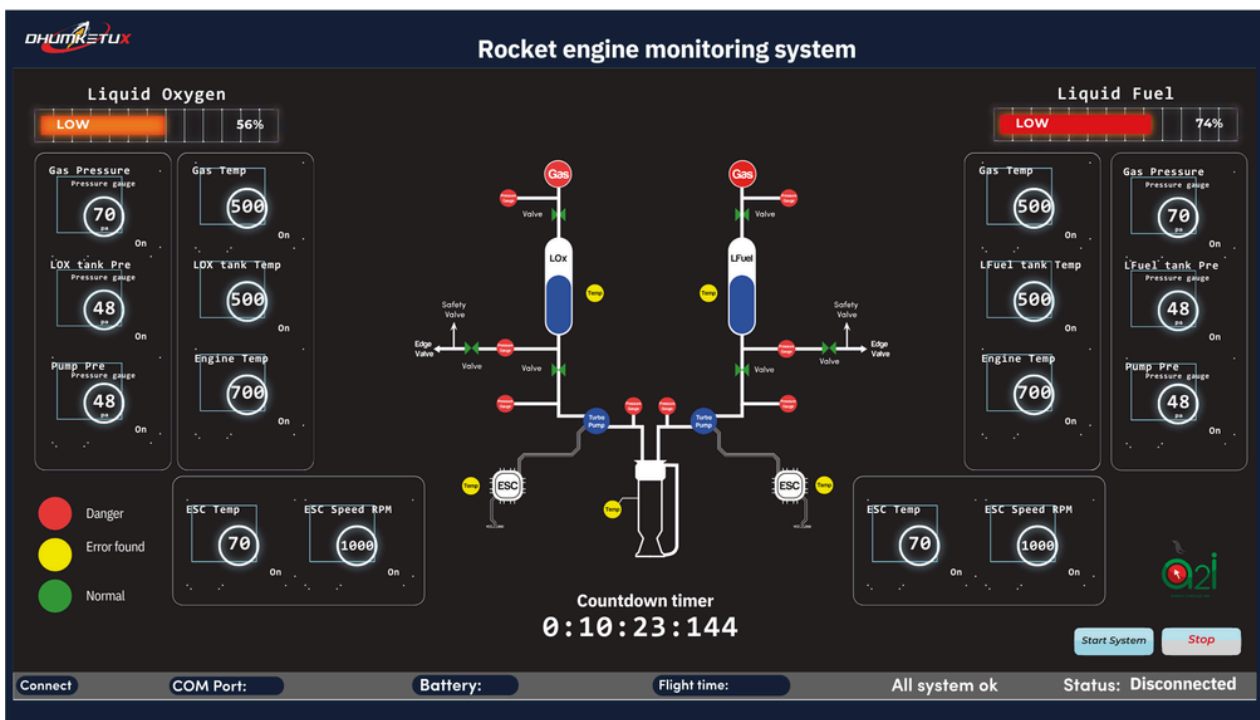
Timeline: October 2022 – January 2024

Description:

Samrat worked on the front-end of the Rocket Engine Monitoring System (REMS) using Unreal Engine, a visualization software built to monitor and display real-time data from rocket engine tests.

Key Contributions:

- Created user interface for displaying engine performance data (temperature, pressure, thrust, etc.)
- Designed real-time visualization dashboards within Unreal Engine
- Collaborated with system engineers to align the software with rocket telemetry data
- Impact:
 - The REMS interface enhanced test monitoring accuracy and provided engineers with a visual, real-time understanding of engine behavior during simulations.



Samrat's Works at DhumketuX (2022–2024)

3. Ulka Rocket Avionics System V-01 Testing

Role: Testing & Technical Support Team Member

Timeline: 2022–2023

Description:

Samrat actively participated in the successful testing of the DhumketuX Avionics System V-01, conducted aboard the Ulka Rocket, a sounding rocket designed to validate avionics performance under real flight conditions.

Key Contributions:

- Assisted in pre-launch preparation, system checks, and test procedures
- Helped collect and verify flight telemetry data from onboard sensors
- Supported post-flight analysis to refine sensor calibration and control systems
- Impact:
 - This milestone validated the team's avionics design, improving sensor reliability, retracting actuators, and flight control systems — a crucial step toward advancing aerospace innovation in Bangladesh.
- Project Leadership:
 - 🚀 Erfan Mahmud Tushar
 - 🚀 Sydur Rahman



Md. Shakil Anower Samrat and team performing pre-launch tests on the Ulka Rocket Avionics System V-01 during field testing, 2023

Samrat's Works at DhumketuX (2022–2024)

4. Digital Promotion and Facebook Advertising

Role: Social Media Manager & Campaign Operator

Timeline: Mid 2023

Description:

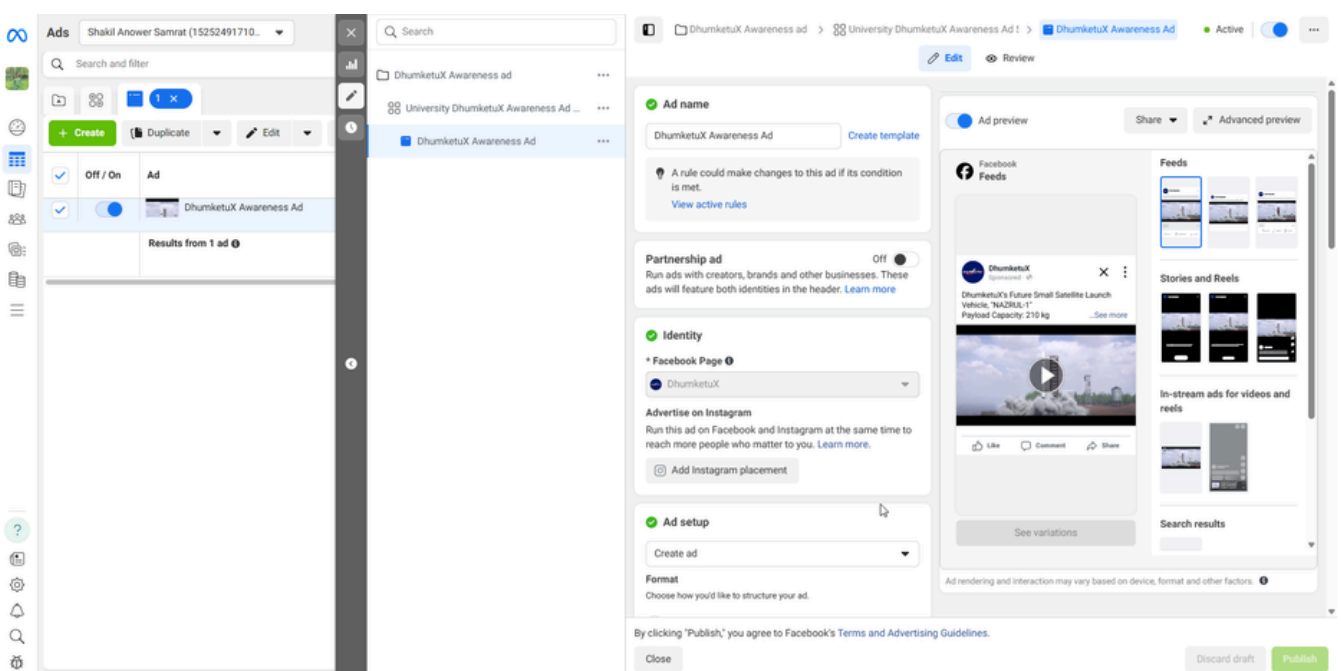
Samrat managed Facebook advertising campaigns for DhumketuX, helping the team reach a broader audience and promote its technological initiatives to the public.

Key Contributions:

- Created and optimized Facebook ad campaigns to boost project visibility
- Designed promotional content highlighting DhumketuX's research and achievements
- Analyzed campaign metrics to improve engagement and reach
- Impact:
- The social media promotion strengthened DhumketuX's digital presence and attracted attention from tech enthusiasts, students, and potential collaborators across Bangladesh.

Impressions	Frequency	Attribution setting	Results	Amount spent	Cost per result
56,260	1.02	7-day click or 1-day view	54,893 Reach	\$2.89	\$0.05 Per 1,000 People Reached

Partial Results of Running New Ad in DhumketuX Facebook Page



Running New Ad in DhumketuX Facebook Page

Engagement in Social Gatherings and Public Events Actively participated in diverse social and professional events, fostering connections, representing organizational initiatives, and contributing to community engagement efforts.



“Bidrohi Rocket” commercial and Engine Testing

Summary

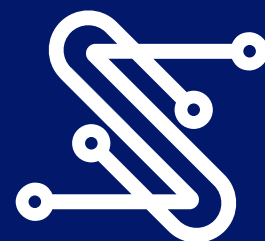
During my two years at **DhumketuX (Feb 2022 – Jan 2024)**, I worked on several exciting projects that helped me grow as a **developer and researcher**. I developed the **DhumketuX Operating System**, which made our internal workflows more organized and efficient. I also worked on the **Rocket Engine Monitoring System (REMS)** in Unreal Engine, creating real-time dashboards to visualize engine performance.

One of the highlights of my journey was participating in the **Ulka Rocket Avionics System V-01 test**, where I helped validate sensors, actuators, and flight control systems. On top of that, I ran Facebook ad campaigns to promote DhumketuX's work and reach more people.

These experiences taught me a lot about software, aerospace research, teamwork, and digital communication. I'm grateful for everything I learned and the amazing people I worked with; it was an unforgettable journey.

What Next?

After two amazing years at DhumketuX, I decided to focus fully on my own venture, Softsasi, a software company I founded in 2022. Softsasi creates high-quality, affordable, and innovative software solutions, and gives me the chance to apply everything I learned while building products that can make a real impact. I'm excited for this chapter and the opportunities ahead.



SOFTSASI

THANK YOU

The best way to predict the future is to create it.

Thank you to my mentors, colleagues, friends, and family for their guidance, support, and encouragement. Your belief in me made this journey at DhumketuX.



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