

# Shashank Dewangan

Software Developer | ML & ROS Developer | Full Stack Developer  
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LINKEDIN | LEETCODE | PORTFOLIO | GITHUB

## EDUCATION

KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY  
COMPUTER SCIENCE & ENGINEERING B.TECH

August 2021 - August 2025  
Bhubaneswar, Odisha

## EXPERIENCE

NTPC LIMITED | SUMMER SDE INTERN

Singrauli, Madhya Pradesh, India | June 2023 – July 2023

NTPC Limited is **India's largest power generation company, driving economic growth**, ensuring energy security, and promoting environmental sustainability.

### Roles/Responsibilities :

- **Developed a Full-stack Workplace Efficiency (5S Score) metric scalable webapp using ReactJS** to enhance productivity and streamline operations for **Indias largest and world's 9th largest Thermal Power Plant** by 70%
- Collaborated with a team of developers in developing **Material Procurement Portal utilizing C# and .NET**, to streamline the ordering process of essential vital materials required for the efficient functioning of power plant by 100%
- Gained comprehensive knowledge of **server handling and management principles**

TEAM SWAG | ML & ROS DEVELOPER

Bhubaneswar, Odisha, India | April 2023 – Present

- **Spearheading Project SwaG**, a groundbreaking **Autonomous Vehicle initiative integrating ML and ROS**, propelling KIIT University's School of Mechanical Engineering **towards full autonomy for competing at IGVC in Michigan, USA**.
- **Managing a team of 5 developers** and developing ROS packages, integrating them with **ML algorithms and computer vision techniques** to create a robust and efficient autonomous system
- Simulating Robots performance, test-cases and integration in **Gazebo Realtime** on various **VM's Linux distro environments**.

IOT LAB | FULL STACK DEVELOPER

Bhubaneswar, Odisha, India | September 2022 – Present

- **Collaborating with a team of 15+ developers** in planning and executing projects using web development technologies, **utilizing version control applications for SDLC & Agile methodology**.
- **Mentored and guided a team of 10+ members**, providing them with curated resources and opportunities to enhance their skill sets, resulting in a 25% increase in project delivery efficiency
- **Successfully completed 10+ mini and major projects** in the industrial and freelance sector.

## SKILLS

PROGRAMMING LANGUAGES	C/C++, JavaScript, TypeScript, Java, Python3, C#, .NET
LIBRARIES/Frameworks	MERN, ReactJS, NextJS, Flask, NodeJS, ExpressJS, J2EE
TOOLS / PLATFORMS	AWS, GCP, Git, ROS2, Arduino, UNIX, Linux, Data Structures, HTML&CSS
DATABASES	MongoDB, MySQL, SQL, SQL+

## PROJECTS / OPEN-SOURCE

ALGO\_ENIGMA | LINK

Java, JavaFX, JavaScript, Google Maps API, HTML, CSS

Comparative Shortest Path Algorithms for Real-time Navigation on Google Maps

- Developed **Navigation Algorithms and integrated in Google Maps API** , to visualize performance and accuracy of path finding algorithms. **steering clear of Google's proprietary closed-source methods** and ensuring a high degree of customization and adaptability to diverse real-world scenarios.
- **Utilized BFS, Dijkstra's, and A\* algorithms to deliver efficient path planning solutions** . Integrated performance visualization tools within the Google Maps API for a clear demonstration of algorithmic accuracy and effectiveness..

## ARTISTICK | [LINK](#)

JavaScript, ReactJS, NodeJS, MongoDB, AWS S3 instance, Vercel

Fully and solely developed (UI/UX + dev) a user-friendly WEB-2-Print Ecommerce website that allows users to shop from a myriad of available designs.

- Generating consistent revenue of more than **20k/month INR** with a **5% growth** trajectory
- Over **10000 people** have used it so far and also allows designers and enthusiasts to upload their own work and earn commission as per sales
- **Implemented on request rendering (infinite scroll), to optimise network performance and loading speeds through ensuring low latency** in low speed network connections
- **Gathered** and learnt relevant **Financial Domain understanding usually aligned with projects of scale** .

## COLLABSYNC | [LINK](#)

TypeScript, JavaScript, Next.js, React.js, TailWindCSS, Prisma, Socket.io

Allows developers and multi-functional team members to **collaborate effectively for a better remote work experience** .

- **Ensured database integrity** and an **error-free user experience by applying ACID properties using SQL/MySQL** .
- Implemented **Server Side Rendering** and real-time chat functionality using **WebSockets** , also allowing video and audio chat for better collaboration.
- Working on **Implementing a freemium model** for public release.

## MOHORT | [LINK](#)

TypeScript, JavaScript, NextJS, MongoDB, BrightData, NodeMailer, WebAPI

Web Scrapes prices of your product items and notifies when is the best time to make an online purchase and presents it in a clean and intuitive User Interface (UI)

- Allows customers to have real-time analytics and make smart purchase decisions.
- Uses active and complex web scraping measures developed in the form of **Web-Scraping Bot that handles CAPTCHA's and avoids IP routing measures**.
- **Employed CRON job scheduling to automate data updates** , ensuring the platform delivers timely and accurate pricing information. **enhancing user decision-making with up-to-date insights** .

## SWAG\_SIMULATOR | [LINK](#)

Makefile, CMake, C, C++, Python, Shell, PowerShell, TypeScript

Our official simulation package for IGVC. It involves the simulation of a self-driving vehicle according to the rules of IGVC

- Integrating various ROS packages using OpenCV library and ML algorithms for Mark-V autonomous vehicle
- Implementing **ROS nodes with ROS Services and Actions to deal with complex real-time scenarios in open world and actively testing ROS and ML algorithms performance of Path Planning, Image & Video Processing in Gazebo Realtime Simulation Environment**

## HONORS & AWARDS

- Actively involved in managing and leading the whole SWaG project. collaborating with seniors to get sponsorships and fundings/sanctions
- Co-Founded Artistick.com. Working towards creating and devlivering an ever-evolving e-commerce experience. Shaping the future growth trajectory of the startup.
- Published Research Paper titled "Enabling Conversations in Virtual Realms: Chatbot Integration in the Metaverse" in ACM Transactions on Asian and Low-Resource Language Information Processing
- Diploma of Completion in "Automation Explorer" Path, learning basics and necessary tools to become an Robotic Process Automation Developer. from UiPath Academy.