# Saroj Kumar Pahi

# Software Developer

sarojpahi@gmail.com

+918249816465

sarojpahi.github.io

Enthusiastic Software Developer with a passion for developing scalable web applications and working across the full stack. Seeking to work in an environment that can encourage me to succeed and grow both personally and professionally to utilize skills and knowledge.

# **Experience**

Skyeair Mobility (Angular, AWS, Nodejs, Python, TypeScript)

April, 2023 - present

- Successfully optimized and resolved performance issues in the company's aviation application, resulting in a 40% improvement in overall performance.
- Implemented a cost-effective architecture, reducing company expenses while maintaining and improving system reliability and efficiency.
- Mentored and groomed junior developers, providing guidance and support to enhance their skills and productivity.
- Collaborated closely with the R&D team to establish automated winching functionality for drones, ensuring safe and precise landings during automated missions.
- Demonstrated proficiency in Angular development, contributing to the creation of user-friendly and responsive web applications.
- DEGN Labs (Nextjs, React, AWS, Nodejs, Express, Python, TypeScript)

  Jan, 2022 March, 2023
  - Spearheaded the development of decentralized applications (dApps) on the Solana blockchain platform.
  - Demonstrated proficiency by architecting responsive and user-friendly web applications using Next.js, React, Node.js, and Python.
  - Leveraged Three.js to incorporate captivating 3D graphics and visualizations, enhancing user engagement and interactivity.
  - Implemented robust security measures, including encryption, authentication, and smart contract auditing, to safeguard blockchain applications.
  - Collaborated effectively with cross-functional teams to ensure seamless integration of frontend and backend components.

## Education

Masai School - Remote

2021 - 2022

• Full-Stack Web Development

Samalkha Group Of Institutions - Haryana

2016 - 2020

• B.Tech in Aeronautical Engineering

#### Skills

#### Tech. Skills

- CSS | SCSS | Tailwind
- JavaScript | TypeScript
- Java | Python | PHP
- C | C++ | C#
- NodeJs | Express | AWS
- Angular | React | NextJs
- Blazor | Laravel | Django
- ThreeJs | Cesium | Redux
- MongoDB | DynamoDB
- MySQL | Firebase | Redis

#### Soft Skills

- Problem-solving
- Adaptability
- Time Management
- Eye for Detail
- Self-Motivated

# **Recent Projects**

#### Drone Delivery System (Python, AWS)

August, 2023 - September, 2023

#### Description

In my role as a software developer at Skyeair, I played a pivotal role in the development of an autonomous drone delivery system. I assumed responsibility for the coding aspect, working alongside the R&D team to create a system that leveraged ArUco code scanning for precision, enabling seamless automated deliveries.

#### **Key Responsibilities/Achievements**

- Single-handedly led the coding aspects of a drone programming project focused on achieving precision loitering, landing, and mission flow automation.
- Successfully implemented ArUco code scanning technology to identify and correct GPS errors, ensuring precise positioning over designated pod locations.
- Automated the process of opening and closing pods upon drone command, including winching operations.
- Leveraged AWS IoT Core to enable communication and coordination between the drone and pods throughout the mission.
- Developed an automated validation mechanism to confirm successful pod openings.
- Enhanced the drone tracking system to provide location feeds through AWS IoT Core, enabling real-time monitoring and tracking of the drone's movements during missions.
- Collaborated effectively with cross-functional teams to integrate the software with drone hardware and logistics systems, enabling efficient and secure automated delivery missions.

## SkyeUTM (Angular, AWS, Nodejs, Puppeteer, Bootstrap, Typescript) April, 2023 - July, 2023

#### Description

In my role as a software developer at Skyeair, I undertook a pivotal project aimed at enhancing and modernizing our Unmanned Air Traffic Management System (SkyeUTM) dashboard. This project involved a comprehensive overhaul to meet the evolving needs of both pilots and administrators, while transforming the platform into a real-time, data-driven system.

#### Key Responsibilities/Achievements

- Spearheaded the comprehensive upgrade and feature enhancement of the SkyeUTM dashboard.
- Pioneered the implementation of WebSocket technology, revolutionizing data communication and rendering the SkyeUTM a real-time platform.
- Orchestrated seamless API integrations, expanding data capabilities and functionalities while simplifying external data retrieval.
- Innovated advanced drone tracking algorithms, providing precise location and activity insights, augmenting safety and situational awareness.
- Engineered performance optimization measures, identifying and eliminating redundant loops and setIntervals to ensure a more responsive user experience.
- Transferred resource-intensive operations to the backend, enhancing system efficiency and reducing client-side workload.
- Introduced Puppeteer for background report generation, liberating users from the obligation to maintain an open web application for report creation.
- Implemented comprehensive mission logs to facilitate efficient monitoring and analysis of unmanned traffic vehicle activities.
- Leveraged WebWorkers to streamline map rendering and API calls, curtailing resource consumption and elevating overall platform efficiency.

#### **Hobies**

• Basketball • Chess • Dota 2 • Reading • Gardening