# SUHAS PALANI

+1 773-850-4663 | spalani3@hawk.iit.edu | linkedin.com/in/suhaspalani/ | github.com/SuhasPalani | suhaspalani23.netlify.app/ | Recommendations: https://bit.ly/4gmVcid

## **EDUCATION**

Illinois Institute of Technology, Chicago, IL

May 2025

Master of Science, Computer Science, GPA 3.60

Visvesvaraya Technological University, Bengaluru, India Bachelor of Engineering, Computer Science, VTU, GPA 3.60

Jul 2023

## **SKILLS**

- PROGRAMMING LANGUAGES: Java | C++ | C# | Python | SQL | Go | TypeScript | JavaScript | HTML | CSS
- FRAMEWORKS & LIBRARIES: FastAPI | Flask | Django | React | Redux | Angular | Node.js | GraphQL | Vue.js | .NET
- DATABASES & TOOLS: PostgreSQL | MongoDB | Snowflake | Redis | Firebase | DBT Labs | Kafka | Git | Postman
- CLOUD, DEVOPS & INFRASTRUCTURE: AWS | GCP | Azure | Docker | Kubernetes | CI/CD pipelines | Jenkins
- ARCHITECTURE & DESIGN: Microservices | RESTful API Design | API Gateways | Scalable Systems
- TESTING & DEBUGGING: Unit Testing | API Testing | ETL Testing | Log Analysis | Quality Assurance
- OBSERVABILITY & SECURITY: Grafana | New Relic | Keycloak

#### WORK EXPERIENCE

#### SOFTWARE ENGINEER INTERN

Hamilton Digital Assets, Chicago, IL

Oct 2024 – Dec 2024

- Architected authentication infrastructure using MongoDB, Kafka, and Keycloak within a microservices architecture, supporting hightraffic apps, ensuring reliability, and optimizing security, resulting in a 40% reduction in vulnerabilities with senior engineers.
- Developed React/React Native apps with GraphQL integration, improving load times by 20% and enhancing user engagement. Assisted in optimizing the CI/CD pipeline, reducing deployment cycles by 50% through build process improvements.
- Contributed to development of an AI-powered chatbot solution using Node is on Kubernetes, improving customer support response times by 30% while handling high daily queries, ensuring optimal performance and uptime across production environments.

#### FULL STACK SOFTWARE ENGINEER INTERN

Varcons' Tech Pvt Ltd, Bengaluru, KA

Sept 2021 - Aug 2022

- Optimized website features to improve page load speed by 15%, handling 500+ daily user requests. Used Dockerized environments to simulate production loads, enhancing performance and reducing bounce rates.
- Designed fully responsive layouts for desktop, tablet, and mobile, increasing mobile engagement by 20% and average session duration by 12%. Implemented automated visual regression testing to ensure cross-device UI consistency.
- Developed and validated front-end to back-end integrations using REST APIs, reducing data inconsistencies by 25%. Automated test scripts uncovered 8+ bugs per sprint and integrated them into CI/CD pipelines, improving product quality by 30% over three cycles.

# **PROJECTS**

TRACKSPLITAI Feb 2025 - Present

- Architected and deployed a scalable microservices ecosystem of 7 independent services using FastAPI, Docker, and Kubernetes, achieving 99.9% system reliability. Implemented an event-driven backend with RabbitMQ and MongoDB Atlas, ensuring data consistency and enabling Google Gemini API for AI-driven expense splitting, reducing manual tracking time by 80%.
- Delivered a full-stack solution featuring a React/TypeScript frontend and JWT-secured backend, supporting real-time expense tracking, group management, and Stripe payments. Established a CI/CD pipeline with Docker Compose and Kubernetes for automated cloud deployment, tested with 100K fake transactions and 20 concurrent users.

## **NUTRITRACKAI** (Open Source)

Apr 2025 - May 2025

- Developed an AI assistant using OpenAI GPT APIs and MongoDB to extract structured nutrition data from voice inputs, handwritten meal logs, and natural language queries, reducing manual food tracking time by 80% for health-conscious users.
- Collaborated with a data science partner to implement advanced NLP preprocessing and prompt engineering techniques, achieving 95% data extraction accuracy with consistent recommendations (calories, macros, allergens) across diverse dietary patterns.

# REAL-TIME INSTAGRAM ANALYTICS DASHBOARD

Feb **2**025 – Apr 2025

- Built a real-time influencer analytics dashboard for marketing teams using Kafka, DynamoDB, and Vue.js with microservices architecture, enabling performance tracking and reducing campaign analysis time by 30%.
- Engineered scalable scraping infrastructure via Apify with exponential backoff retries and adaptive rate limiting, achieving 99% uptime while processing 1,000+ influencer profiles per hour for social media agencies.

Apr 2024 - Sept 2024

- Developed a cross-platform app using Python Flask, Java microservices, MongoDB, and React Native for real-time video and text summarization, deployed on AWS Kubernetes with CI/CD pipelines and achieved 28% increase in mobile user engagement.
- Led end-to-end development of 25+ REST endpoints with integrated AI chatbots, enabling natural language queries for lecture reviews and meeting notes. The project earned recognition at OraHacks and TikTok Tech Jam, competing against 600+ teams.

# HONORS AND ACHIEVEMENTS

Graduate Teaching Assistant, Software Project Management

Aug 2024 – Dec 2024

Top 12 Finalist, TikTok Tech Jam 2024 – Recognized for developing a scalable backend system from 600+ teams.

Aug 2024 Apr 2024

Winner, OraHacks 2024 - Led an AI mobile app with text-to-video/audio news, voted top solution.

Jun 2023

Published Paper: "API Contract Driven Testing," Int'l Conference on Advanced Engineering & Technology