Nipul Yansith

Software Engineer | Full Stack Development

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Profile

Full-stack engineer (Angular, TypeScript, Node.js, AWS) building enterprise workflow, analytics and AI-powered products used by multiple client companies. Delivers features end to end, from configurable workflow modules and self-service reporting to AI-driven review processing. Experienced in agile, sprint-based delivery with CI/CD pipelines, working closely with client-facing teams. NBQSA Merit Award winner and First Class Honours graduate who keeps learning new technologies.

Professional Experience

Software Engineer | Emojot (Pvt) Ltd. – Colombo, Sri Lanka **May 2026 – Present**

- **Self-Service Customer Onboarding App:** Built a self-service customer onboarding app using Angular, replacing manual database-based company setup by the customer success team. Implemented email OTP verification, survey and workflow creation, Google and Facebook connection flows for Online Review Management (ORM), and automated support email alerts for onboarding failures.
- **AI Sentiment-Scoring Scheduler:** Built an hourly sentiment-scoring scheduler for a major client's AI-powered review-processing workflow, scoring newly added reviews per company using OpenAI. Designed it to be idempotent and self-healing: failed runs are retried on the next cycle without duplicate scoring, and Redis locks prevent overlapping runs per company. Implemented full review-history backfilling during new-company onboarding using 10 concurrent workers with MongoDB persistence.
- **Incident Management Frontend Rebuild:** Rebuilt the legacy Workflow Management frontend from scratch using Angular and TypeScript within the Unified Experience Console, implementing saved queues, advanced filters, workflow-driven fields, configurable incident tables and exports, alongside incident management features for status and assignee updates, comments, activity history and subtasks. Successfully migrated around 10 client companies to the new interface, with migration ongoing for the remaining clients.
- **Self-Service PowerPoint Report Builder:** Designed a self-service PowerPoint report builder using PptxGenJS, adopted by 10–15 users across multiple companies. Automated branded presentation generation, replacing manual screenshots; includes an interactive builder for adding, deleting and reordering pages, resizing widgets and adding text.
- **Configuration-Driven Incident Forms:** Developed configuration-driven incident forms for a client with 30+ users, replacing lengthy legacy surveys with streamlined forms featuring custom fields, status validation and file uploads.
- **Analytics Dashboards:** Delivered social listening and review analytics dashboards with 10+ configurable widgets that clients can add to their own dashboards, alongside reusable filters, interactive drilldowns and exports.

Software Engineer Intern | Emojot (Pvt) Ltd. – Colombo, Sri Lanka **Dec 2024 – Dec 2025**

- **Agentic AI Alerting PoC:** Developed an agentic AI proof of concept in Node.js using LangChain that combined feedback and CRM data to generate personalized email/SMS alerts for negative feedback.
- **Social Listening & ORM Configuration Portal:** Built a full-stack portal that lets the customer success team create and edit Social Listening and ORM configs directly, replacing a manual handoff where developers inserted them into the database.
- **Geofenced Field-Sales Platform:** Developed features for a geofenced field-sales platform using React, Node.js/Express.js, including bar registration, location-based check-in/check-out, complaint workflows and approval management, plus REST API endpoints for searching bars and salespersons.
- **Configurable Workflows & Subtask Forms:** Implemented configurable workflows using JSON Logic and dependent dropdowns; built subtask forms with parent-field mapping, defaults, visibility and read-only controls, and API endpoints for custom case-report filters.
- **Incident Management UI Revamp:** Revamped incident management interfaces with inline status and assignee updates, image/PDF previews, paginated subtask tables and quick comment actions, letting users manage cases without leaving the main view.

Technical Skills

Languages: TypeScript, JavaScript, Python, SQL, PHP, Java, C

Frontend & Mobile: Angular, React, Next.js, React Native, HTML, CSS, Tailwind CSS

Backend: Node.js, Express.js, Flask, REST APIs, JSON Logic

Databases & Caching: MongoDB, PostgreSQL, MySQL, SQLite, Redis

AI & Computer Vision: OpenAI API, LangChain, OpenCV, YOLO, MediaPipe, NumPy, Pandas

Cloud & DevOps: AWS (API Gateway, Lambda, S3, CloudFront, CloudWatch, SQS, SES, SNS, CodeBuild, ECR), Docker, CI/CD, Bitbucket Pipelines

Tools & Practices: Git, GitHub, Bitbucket, Jira, Postman, Jest, Studio 3T, MongoDB Compass, Agile/Scrum

Selected Engineering Projects

PitchIQ – Cricket Bowling Biomechanics Analysis Platform Jan 2025 – Present

Python, OpenCV, YOLOv8, MediaPipe, Flask, Full-Stack Development

- Built a pose-estimation pipeline that extracts bowling biomechanics (knee and elbow angles, stride length, step timing, wrist velocity, head alignment) from a single side-on phone video, with automatic event detection and stump-based calibration. **Merit Award, NBQSA 2026.**
- Validated on 213 deliveries from 23 bowlers, with ICCs of 1.00 for event frames, 0.97 for delivery stride and 0.96 for knee kinematics.
- Benchmarked against two expert coaches' manual estimates; achieved the lowest mean absolute error on all 11 metrics, including elbow angle at arm-back (3.0° vs. 6.9–9.5°) and front-knee angle at foot contact (0.5° vs. 5.1–9.2°).
- Research completed April 2026; now building a coach-focused web platform with video upload, annotated playback, session history, AI-generated PDF reports and a chatbot.

ParkEase – Urban Parking Management Platform for CMC Jun 2024 – Nov 2024

Next.js, TypeScript, Node.js, Express.js, PostgreSQL, React Native

- Built a full-stack urban parking platform with driver and warden mobile apps, QR-based vehicle tracking, live availability, automated toll calculation and payments.
- Built an admin portal with role-based access for managing users, wardens, operations and finances.

GoviSaviya – Farmer-to-Buyer E-Commerce and Logistics Platform Jun 2023 – Apr 2024

PHP, MySQL, JavaScript, CSS

- Built an e-commerce and logistics platform connecting farmers and buyers, with inventory management, dynamic pricing, bulk-order bidding and delivery coordination.

Education

University of Colombo School of Computing May 2022 – 2026

B.Sc. (Hons) in Information Systems | **First Class Honours**

GPA: **3.70/4.00** | Director's List: Four semesters

Ananda College, Colombo 2018 – 2020

G.C.E. Advanced Level (2020) | Z-score: **1.41**

Awards, Certifications & Leadership

- **Merit Award**, National ICT Awards NBQSA, for PitchIQ 2026
- **Finalist**, National ICT Awards NBQSA, for GoviSaviya 2024
- **Top 100 in Sri Lanka**, IEEE Xtreme 18.0 2024
- **Postman API Fundamentals Student Expert**, Postman 2024
- **Java OOP**, LinkedIn Learning and Great Learning Academy 2024
- **Students' Union, UCSC**: Junior Treasurer 2023 – 2024
- **Rekha Music Circle, UCSC**: Secretary, Junior Treasurer, Guitarist, Singer 2023 – 2025
- **AIESEC in Colombo Central**: OCVP - Gramfest | Team Leader - iGV 2022