

ANUJ POKHAREL

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PROFESSIONAL SUMMARY

Software Engineer with 5 years building production systems across SaaS, fintech, and e-commerce and testing it. Specialized in backend architecture (Django/Fast API/), Testing (Selenium/Cypress/Playwright/Detox) cloud infrastructure (AWS), and ML pipelines (TensorFlow/PyTorch) and frontend (React/Next J's/Typescript) along with data analysis. Delivered scalable solutions serving 10K+ users with 99.9% uptime. Proven track record collaborating with cross-functional teams and international clients. Seeking senior engineering roles at innovative tech companies.

TECHNICAL SKILLS

Languages: Python, JavaScript/TypeScript, SQL
Backend: Django, Django REST Framework, FastAPI, REST
Frontend: React.js
Testing Framework: Selenium, Cypress, Playwright, Detox
Testing tools: pytest, Jest, Selenium, unit-test, integration testing
Databases: PostgreSQL, MongoDB, MySQL, Redis
ORM: Django ORM, SQLAlchemy
Tools / Platforms: Git, Celery, Redis, Stripe API, PowerBI, Twilio, Postman, JIRA, Expo, GitLab, GitHub
API Tech & Documentation: GraphQL, Swagger, Postman
Testing & Debugging: API Testing, Webhook Verification, Error Handling, Performance Optimization
Methodologies: Agile/Scrum, REST APIs, Event-Driven Systems, Microservices, TDD, System Design

PROFESSIONAL EXPERIENCE

Backend Developer (Contract)

Neatly – On-demand Cleaning Marketplace SaaS

Feb 2025 – Aug 2025

Remote, Georgia USA

- Architected and deployed backend microservices using **Django + PostgreSQL** serving 5K+ active users; designed normalized database schemas reducing query time by 40%
- Implemented comprehensive test suite with **pytest** achieving 85% code coverage; wrote 200+ unit tests, integration tests, and API endpoint tests ensuring system reliability
- Established **CI/CD testing pipeline** with automated test execution on every commit; integrated **Selenium** for end-to-end workflow testing, catching 95% of bugs before production
- Implemented asynchronous task processing with **Celery + Redis** for image optimization, email notifications, and scheduled jobs; reduced API response time from 800ms to 200ms
- Integrated **Stripe payment gateway** and **Twilio OTP authentication**, processing \$50K+ monthly transactions with zero payment failures; validated webhook integrity with signature verification tests
- Built cross-platform mobile app using **React Native** with camera integration, geolocation services, and push notifications; implemented **Detox** for automated mobile UI testing achieving 4.5+ app store rating
- Performed load testing using **Locust** simulating 1000+ concurrent users; optimized database queries and added composite indexes, improving dashboard load time by 60%

Full Stack Developer (Contract)

Codeilo / Codelio Solution

Aug 2024 – Nov 2024

Remote

- Developed multi-tenant SaaS ERP system using **Next.js** and **Django, PostgreSQL**; implemented role-based access control (RBAC) supporting 20+ permission levels
- Designed and implemented **RESTful APIs** with JWT authentication, rate limiting, and comprehensive error handling; maintained 99.5% uptime
- Built subscription billing system with recurring payments, usage tracking, and automated invoicing
- Containerized applications using **Docker** and set up **CI/CD pipelines** with GitHub Actions, reducing deployment time from 2 hours to 15 minutes
- Project Worked: OurCEO project, OurBriefcase Project

Machine Learning Engineer (Research Intern)

Real Time Solution Pvt Ltd

Dec 2024 – Feb 2025

Kathmandu, Nepal

- Model Architecture Design-Testing Different model Architecture and comparing their accuracy on time series
- Developed time-series forecasting models (**VAR**, **SARIMA**, **LSTM**) for river water-level prediction achieving 85% accuracy on 7-day forecasts
- Built end-to-end ML pipeline including data collection, ETL processing, feature engineering, and model deployment; automated daily retraining jobs
- Created data visualization dashboards and alerting system for real-time monitoring; presented findings to stakeholders and government agencies

Software Engineer & ML Consultant (Freelance)

Jun 2021 – present

Self-Employed

Remote

- Delivered 15+ client projects including e-commerce platforms, job portals, and document management systems using **Django/FastAPI/React** tech stack
- Implemented **TDD methodology** across all projects writing tests before code; maintained 80%+ test coverage using **pytest, Jest, and Cypress** for backend, frontend, and E2E testing
- Developed automated testing frameworks for web applications using **Selenium** and **Playwright**; created reusable test scripts reducing QA time by 50%
- Built NLP models for spam detection (95% accuracy) and Nepali-English translation using **transformer architectures** and Hugging Face; validated models with rigorous A/B testing and performance benchmarking
- Developed computer vision solution for counterfeit currency detection using **CNNs**; achieved 92% precision on test dataset through extensive hyperparameter testing and cross-validation
- Conducted comprehensive API testing with **Postman** collections and automated regression testing; performed security testing identifying and fixing OWASP Top 10 vulnerabilities
- Implemented **RAG-based chatbot** using LangChain and OpenAI API for customer support automation, reducing response time by 70%; built integration tests for LLM output validation
- Worked on **Salesforce** projects including Apex classes and triggers, Process Builder, Flow, Einstein Analytics, Force.com Sites, and complex SOQL queries; wrote Apex test classes achieving 100% code coverage for deployments

KEY PROJECTS

Counterfeit Currency Detection System | *TensorFlow, OpenCV, Python, FastAPI*

2024

- Led team of 3 to develop CNN-based classification system detecting fake currency notes with 92% accuracy
- Created custom dataset of 5000+ images with data augmentation; implemented transfer learning with VGG16
- Deployed REST API serving 100+ requests/day; implemented model monitoring and versioning

River Water-Level Forecasting System | *Python, SARIMA, VAR, PostgreSQL*

2024

- Built production-grade forecasting pipeline with automated ETL, feature engineering, and model retraining
- Achieved 85% accuracy on 7-day forecasts; implemented real-time alerting system for flood warnings

HAMANIO E-Commerce Platform | *Django, React, Redis, Celery, LangChain*

2025

- Developed full-stack marketplace with product catalog, shopping cart, payment integration, and order management.
- Implemented background job processing with Celery and integrated RAG-powered chatbot for customer support.
- Designed and executed automated UI and functional tests using Selenium, ensuring high-quality releases and seamless user experience across web and mobile platforms.
- Created reusable test scripts and frameworks for regression testing, reducing manual testing effort by 40%.

EDUCATION

Bachelor of Computer Engineering

Kathford Engineering College, Tribhuvan University

2019 – 2023

Lalitpur, Nepal

- **Relevant Coursework:** Data Structures & Algorithms, Machine Learning, Database Systems, Computer Networks, Operating Systems, Software Engineering, Cloud Computing

CERTIFICATIONS & AWARDS

Front-End Development with React – Coursera (Meta)

AWS Certified Cloud Practitioner – In Progress

Academic Excellence Award – Kathford Engineering College, 2022

ADDITIONAL INFORMATION

Languages: English (Professional), Nepali (Native), Hindi (Conversational)

Interests: Open-source contribution, Competitive Programming, AI Research, Tech Blogging