

Sujal Ratna Tamrakar

sujalratnatamrakar@gmail.com

477 Lindbergh PL NE

+1-937-604-4954

www.sujalratnatamrakar.com.np

linkedin.com/in/sujalratnatamrakar

github.com/sujalratnatamrakar

EDUCATION

Georgia State University

Master of Science in Data Science and Analytics - Big Data and Machine Learning

Atlanta, Georgia

2026

Prime College, Tribhuvan University

Bachelor of Science in Computer Science and Information Technology

Kathmandu, Nepal

2020

TECHNICAL SKILLS

Languages: PHP, Dart, Python, Java, SQL, JavaScript, HTML, CSS

Frameworks and Libraries: Laravel, React, Flutter, Livewire, Filament, D3.js, Chart.js, ApexCharts, Vue.js

Tools and Platforms: Docker, Git, Tomcat, Geoserver, Mapbox, Redis, RabbitMQ, MinIO, ngrok, Horizon, SQL Workbench, VS Code, IntelliJ

Database Technologies: PostgreSQL, PostGIS, MySQL, Supabase, Firebase

Web Servers: Apache, Nginx, Caddy

Development Practices: RESTful APIs, Query Optimization, Object-Oriented Programming, Multi-Tenancy, CQRS, Domain Driven Development, Event Sourcing, Parallel Testing

EXPERIENCE

Graduate Teaching Assistant

Georgia State University

Aug 2024 – Current

Atlanta, Georgia

- Grade and provide feedback on 80-100 weekly lab assignments for Principles of Computer Science, covering Python, OOP, Algorithms, Data Structures, and libraries like NumPy and Pandas.
- Collaborate with 3 faculty members, including one professor and two lab instructors, to ensure grading consistency and address assignment-related issues.

Software Engineer

Islington College (ING Group)

Jun 2023 – Jul 2024

Kamalpokhari, Kathmandu

- Developed and maintained back-end systems and APIs for 10+ websites and information systems, optimizing query performance with some queries running up to 2 times faster.
- Enhanced multi-tenant support for 200+ users and set up a testing infrastructure to elevate code quality and meet performance standards.

Mid-Level Web Application Developer

All Pasa Public Ltd.

Dec 2022 – Jun 2023

Shankhamul, Lalitpur

- Upgraded eCommerce system modules and integrated payment gateways using Laravel and Vue.js, reducing query duplication by 80%.
- Boosted code review efficiency by 20% through refined documentation and structured coding practices.

Web and Mobile Application Developer

Innovative Solution Pvt. Ltd.

Apr 2021 – Dec 2022

Chakupat, Lalitpur

- Built a REST API and full-stack web application with Laravel, React, PostgreSQL, Flutter, and Docker, cutting deployment time by 50%.
- Optimized data visualization and management using PostGIS and libraries such as D3.js, Chart.js, and ApexCharts, increasing analysis speed by 20%.
- Refined codebases and created detailed documentation, leading to a 25% reduction in code review time.

Image Annotator/ QA

CloudFactory

Aug 2019 – Apr 2021

Jhamsikhel, Lalitpur

- Achieved 95% accuracy in image annotation and increased project efficiency by 25% through improved team communication.
- Reduced miscommunication-related errors by 15% by facilitating effective team interactions.

PROJECTS

- GROQ API Document Interaction** | *Streamlit, LangChain, FAISS* 2024
- Engineered a solution using GROQ API and the "mixtral-8x7b-32768" AI model for document interaction, and designed a Streamlit app for conversational interfaces.
 - Utilized LangChain for document handling with OllamaEmbeddings, implemented FAISS for enhanced retrieval accuracy, and crafted custom prompt templates for user-specific queries.
- EV Charging Stations Nepal** | *Flutter* 2022
- Built a Flutter mobile app with 300+ downloads and 100+ active users, featuring location data visualization and interactive modules.
 - Boosted user engagement by 25% and optimized app performance on the Google Play Store.
- Blog (CMS)** | *Laravel, Livewire, Postgres* 2021
- Composed a blog with user posting and commenting features, implemented a role-based user management system, and integrated MailChimp for newsletter subscriptions.
- Heritage Walk** | *JavaScript, Mapbox* 2021
- Developed a web page for storytelling visualization of heritage walks in Kathmandu, incorporating Mapbox maps and styles using Mapbox Studio.

CERTIFICATIONS

- Data Visualization**
FreeCodeCamp 2022
- Responsive Web Design**
FreeCodeCamp 2020
- Learn-a-thon 2020**
Cisco Networking Academy 2020
- Introduction to Cybersecurity**
Cisco 2020
- Certificate of Participation in CF Hackathon**
Cloudfactory 2020
- Certificate of Achievement, IoT Workshop**
DWIT Software CLub 2019