

SWORUP SHAKYA

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PROFESSIONAL SUMMARY

Senior **Full-Stack Software Engineer** with 15+ years of experience architecting and deploying enterprise-scale systems for complex domains, including global *font licensing platform* and *medical supply chain management* software. Proven expert in modernizing sophisticated systems using **Node.js**, **React** and **Vue.js**, with deep experience in microservice architecture, large-scale ETL pipelines, and frontend performance optimization. A technical leader dedicated to delivering robust, scalable, and high-performance software solutions.

CORE COMPETENCIES & SKILLS

Core Competencies	Full-Stack Development, Microservice Architecture, System Design, Data Integrity & ETL, API Design (REST & GraphQL), Frontend & Backend Performance Optimization, Agile/SCRUM
Frontend	JavaScript (ES6+), TypeScript, React, Vue.js, React Native, Redux, Tailwind CSS, Webpack, Vite
Backend	Node.js, Express, PHP
Databases	PostgreSQL, MySQL, MongoDB, Redis
Cloud & DevOps	Docker, CI/CD

EXPERIENCE

Lead Software Engineer

Feb 2023 - July 2025

UBA Solutions Pvt. Ltd. / Monotype

Hybrid

Led a full-stack team of frontend/backend developers and QA to architect and deliver scalable solutions for Monotype's global enterprise font licensing and management platform.

Backend Architecture & Data Integrity (Node.js, ETL, Microservices)

- **Reduced data errors** and **increased data processing speed** by identifying/resolving issues and refactoring major sections of the ETL pipeline (**Node.js**, RabbitMQ) spanning **8+ microservices**.
- Spearheaded the **migration of 26+ microservices** to the latest **Node.js** LTS version, resolving critical vulnerabilities and modernizing the core backend framework.
- **Owned data integrity** for tens of thousands of daily records, unblocking critical platform migration and modernization by ensuring data propagated efficiently across microservices.
- Directed a large-scale data integrity initiative; cleaned, **migrated, gathered, and soft-deleted millions of ETL records** to ensure platform-wide consistency and eliminate data conflicts.

Full-Stack Feature Development & System Design

- Engineered full-stack services (**Nuxt.js**, **Node.js**, **MongoDB**) for key platform features, including a new font tiering system and a 'Related Families' UI, designing all REST APIs, database schemas, and UI components.
- Engineered a system to automatically sync tens of thousands of client font files to remote server farms, integrating multiple microservices to handle large data volumes.
- Designed and delivered a successful Proof of Concept (POC) for a zero-trust, microservice-based authentication system using **AWS Lambda** and **.NET Core**.

Frontend Performance & Modernization (Vue.js, Vite)

- Directed the UI modernization of the Monotype Fonts (MTF) and Monotype Foundry Platform (MFP), migrating 20+ core components and multiple pages from **Vue 2** to **Vue 3**.

- Established the migration patterns and reusable base component library **adopted by other squads**, accelerating their development and modernization timelines.
- Implemented a progressive data/asset loading strategy in **Vue 3**, **increasing page load speeds by over 80%** on complex, license-based navigation and library systems.
- Achieved **>90% frontend performance increase** by identifying critical cache-invalidation bugs, resolving them with Vite configurations, significantly improving LCP and CLS scores.

Senior Software Developer

Aug 2018 - Feb 2023

Sustainable Solutions (NZ) Ltd.

Onsite

- Led the full-stack modernization of mSupply Mobile, a tablet-first, medical supply chain management app, using **React Native** and **RealmDB**.
- Enhanced and contributed to the robust **offline-first architecture** ensuring full functionality in remote locations (warehouses, harbors) with intermittent or no internet access.
- Achieved a **>50% reduction in critical bugs** while delivering significantly faster data sync/load times.
- Instituted faster, regular monthly release cycles, dramatically improving feature velocity and team agility.
- Developed key components for "Conforma," a **GraphQL**-based regulatory form workflow management system, enabling critical features to handle complex dynamic forms and reducing custom form creation time.
- Built multiple standalone **React** data reporting applications, streamlining data processes and **saving hundreds of hours of manual work weekly** for key clients.
- Maintained and enhanced a customized **Grafana** fork (**Go/React**), building plugins to visualize pharmaceutical warehouse and **cold-chain data**, enabling significant reduction in waste.
- Contributed to and built multiple features for the mSupply Desktop application (4D), developing robustness and optimizing functionalities.

Senior Software Developer

Aug 2015 - Aug 2018

Zimris Technologies

Onsite

- Led a 3-person development team and managed the full project lifecycle for a full modernization of a name suggestion website and online forum using **Vue.js**, **PHP (Laravel Lumen)** and **MySQL**.
- Architected and **rewrote "Baby Name Genie"** (**Vue.js**, **Lumen**), enabling the high-traffic site to handle **hundreds of thousands of daily requests** where the original had failed.
- Engineered a multi-tenant site generator (**Cloud Carpenter**) (**PHP**, **Symfony**), **automating a manual website creation process** to enable the client to scale and target **10x more clients**.

Senior Software Developer

Oct 2014 - Jul 2015

Biz Technologies Pvt. Ltd.

- Engineered a modular travel booking platform using **PHP** (**CodeIgniter**, **JQuery**), used to generate multiple themed portal sites with features such as package booking, discounts, offers, itinerary, review, custom itinerary creation, payment, and notification.
- Built **WordPress** websites for multiple local hotels, including **PayPal** integration, room booking, and availability monitoring capabilities provided through plugins.
- Developed a complete website and doctor's availability and appointment booking system for Nidan Hospital using **WordPress**.

Senior Web Developer (ASP.NET)

Jul 2013 - Sep 2014

Wise Yak Solutions Pvt. Ltd.

- Built custom modules, plugins, and themes for the Orchard CMS platform using **ASP.NET MVC4**, **JQuery**.
- Engineered a complex data migration and accessibility solution; used **WGET** to scrape/sanitize content from a DMZ server, then stored and served images/data from **Azure CDN** and **Azure cloud servers**.

Senior Software Developer

Oct 2011 - Jun 2013

Hitechvalley iNet Pvt. Ltd.

- Developed CMS and portal websites using **PHP** **CodeIgniter**, **CakePHP** frameworks and interactive **Flash/ActionScript** applications.

Senior ActionScript/Flash Developer

Jan 2010 - Sep 2011

Grafi Offshore Nepal

- Architected and built the core OOP game engine from scratch in **ActionScript 3** for the "Bingel.be" gamified e-learning platform, replacing an unscalable ActionScript 2 prototype.
- Engineered a modular framework to manage game state, asset/memory, lesson/XML adaptation (adapter pattern), and progress tracking, enabling the rapid development of **26+ games** for its initial release.
- Solely developed the initial engine POC and MVP (engine + first game) within 4 months, navigating limited AS3 community support or frameworks.
- Trained and mentored a team of 5+ developers in **ActionScript 3**, OOP principles, and **Design Patterns**, establishing the technical foundation for the project's success.

Senior Flash/Software Developer

Nov 2008 - Nov 2009

Hitechvalley iNet Pvt. Ltd.

- Developed interactive Flash ActionScript websites and expanded skillset to include PHP, JavaScript, and CMS platforms.

Freelance Flash Developer

Jan 2006 - Nov 2008

Self-Employed

- Created custom Flash/ActionScript applications and websites for various clients, honing skills in client communication and project management.

EDUCATION

Bachelor of Information Technology (BIT) *CGPA: 3.03*

2007

KIST College of Information Technology (KIST-CIT)

Affiliated to Purvanchal University, Nepal.

ADDITIONAL INFORMATION

- **Publications:** Technical Reviewer for "Mastering PHP Design Patterns" by Junade Ali (2016).
- **Languages:** English (Full Professional), Nepali (Native), Hindi (Conversational Proficiency).
- **Authorization:** US H1B visa holder, available for Corp-to-Corp (C2C) engagements.