

# Saman ZAND HAGHIGHI

## Full-Stack Engineer | DevOps Engineer

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 [samanznd.com](http://samanznd.com)

Full Stack Engineer with core expertise in Django backend development and distributed system architecture. Engineered high-throughput applications supporting 30K+ concurrent users while maintaining response times under 400ms. Leveraged diverse framework experience across Django, Gin, ASP.NET, Node.js and Next.js to implement optimal architectural patterns for each project context. Led technical teams through complete development lifecycles while establishing enterprise-grade CI/CD pipelines on cloud platforms. Consistently delivers scalable, maintainable solutions that effectively translate complex business requirements into robust technical implementations.

## COMPETENCIES

<b>Personal Skills</b>	Innovation, Creativity, Problem Solving, Time management, Team leadership, Fast Learner, Critical Thinking, Communication
<b>Programming Languages</b>	Python, C#, JS/ES, TypeScript, Go, C, GraphQL, Bash
<b>Frameworks</b>	Django, Fast API, Flask, Gin, ASP.NET, Next.js, React.js, Vue.js, Angular, Node.js, Express.js, MUI, Ant Design, HTMX, Three.js, Semantic UI, Bootstrap, Alpine.js, TailwindCSS
<b>Cloud Platforms</b>	AWS, Google Cloud, Microsoft Azure, Hetzner
<b>DBMS</b>	PostgreSQL, MySQL, Redis, MongoDB, Cassandra DB, Neo4j, MSSQL
<b>Development Tools</b>	Git, GitLab, GitHub, RabbitMQ, Kafka, Docker
<b>Operating Systems</b>	Ubuntu Server/Desktop, Windows
<b>Others</b>	LaTeX, Software Architecture, NGINX, CoCalc, Moodle, Google Sheets, ML/DL, LLM, CI/CD, Violin

## WORK EXPERIENCES

May 2025 Present	<b>Senior Backend Engineer,  TOROB , Tehran, Iran</b> ➤ Implemented a high-throughput webhook service and progressively rolled it out across platforms, handling millions of calls/day without disrupting core add/update ingestion processes. ➤ Maintained Torob's official WooCommerce (PHP) plugin; adapted webhook delivery using a producer-consumer model backed by WordPress Cron to decouple ingestion from processing and improve reliability under load. ➤ Refactored and restructured the XPath recommendation system; introduced LLM-based + heuristic-based recommendation methods, reducing human intervention to <5 ➤ Operated and stabilized large-scale data infrastructure, resolving issues such as table bloat and memory leaks on datasets with billions+ rows. ➤ Improved code quality across services by enforcing proper typing and strengthening observability practices. ➤ Reduced pending products time-to-update by 6+ hours through pipeline and processing optimizations. ➤ Managed production services on Kubernetes with GitOps-style deployments via Argo CD. Django Python PostgreSQL Redis Kubernetes Argo CD
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October 2024 Present	<p><b>Back-End Developer &amp; Founding Member,  CANADA PRIME JOBS , Vancouver, Canada</b></p> <ul style="list-style-type: none"> <li>➢ <b>Pioneered</b> the software system's architecture utilizing Django and GraphQL; enabled a 40% reduction in API latency and supported a 30% increase in user traffic with zero downtime.</li> <li>➢ <b>Leveraged</b> Strategy design pattern to develop a flexible algorithm selection system, enabling dynamic processing based on data characteristics and improving processing efficiency.</li> <li>➢ <b>Innovated</b> new pub/sub systems for better performance on Django, along with multi-container processes to optimize resource management.</li> <li>➢ <b>Developed</b> a notification system for managing campaigns, allowing efficient communication and tracking for marketing efforts.</li> <li>➢ <b>Deployed</b> cloud infrastructure using Terraform, managing PostgreSQL, Django, Redis, load balancers, storage, and other necessary services in Google Cloud, following a fully cloud-native approach.</li> <li>➢ <b>Integrated</b> AI-based processing using OpenAI API and Vertex AI to enhance various business processes and optimize decision-making.</li> <li>➢ <b>Architected</b> robust software components using advanced design patterns, creating maintainable and extensible systems that reduced technical debt by 35% and accelerated feature development cycles.</li> <li>➢ <b>Implemented</b> Saga design pattern for distributed pub/sub transactions, ensuring atomicity across microservices and reducing system failures by 35% during high-traffic periods.</li> <li>➢ <b>Designed</b> event-driven architecture with Observer pattern for notification systems, enabling real-time campaign updates and improving client response rates by 32%.</li> </ul> <div data-bbox="344 730 1302 751" style="display: flex; justify-content: space-around; gap: 10px;"> <span>Django</span> <span>GraphQL</span> <span>Firebase</span> <span>PostgreSQL</span> <span>Redis</span> <span>Docker</span> <span>GitLab CI/CD</span> <span>Terraform</span> <span>Google Cloud</span> </div>
September 2024 Present	<p><b>Technical Lead, Full-Stack Developer &amp; DevOps,  AI Rodo , Vancouver, Canada</b></p> <ul style="list-style-type: none"> <li>➢ <b>Led</b> a team to deliver a scalable, production-ready application.</li> <li>➢ <b>Managed</b> the codebase, ensuring quality and scalability across frontend and backend.</li> <li>➢ <b>Architected</b> serverless infrastructure with Google Cloud services (Cloud Run, MemoryStore, SQL, Scheduler, Pub/Sub).</li> <li>➢ <b>Streamlined</b> deployments with CI/CD pipelines using GitLab and Google Cloud Build.</li> <li>➢ <b>Containerized</b> the project for consistent environments.</li> <li>➢ <b>Integrated</b> OpenAI assistants and Whisper for AI-driven features.</li> <li>➢ <b>Developed</b> an efficient and flexible web scraping mechanism.</li> <li>➢ <b>Contributed</b> to a user-friendly landing page with WordPress Elementor.</li> </ul> <div data-bbox="344 1110 1253 1132" style="display: flex; justify-content: space-around; gap: 10px;"> <span>Django</span> <span>Next.js</span> <span>Tailwind CSS</span> <span>TypeScript</span> <span>Docker</span> <span>GitLab CI/CD</span> <span>Google Cloud</span> <span>WordPress</span> </div>
August 2024 December 2024	<p><b>Full-Stack Developer,  ZUMRA GROUP , Dubai, UAE</b></p> <ul style="list-style-type: none"> <li>➢ <b>Developed</b> a travel and tourism services platform to streamline bookings and enhance customer experience.</li> <li>➢ <b>Engineered</b> a scalable backend system using ASP.NET Web-API, incorporating Kafka and architecture principles to ensure efficiency.</li> <li>➢ <b>Created</b> a modular Telegram bot using Python-Telegram-Bot, optimized for payment task efficiency and maintainability.</li> </ul> <div data-bbox="344 1364 882 1385" style="display: flex; justify-content: space-around; gap: 10px;"> <span>ASP.NET</span> <span>Python-Telegram-Bot</span> <span>Kafka</span> <span>MSSQL</span> <span>Redis</span> </div>
July 2024 January 2025	<p><b>Full-Stack Developer,  SHARIF UNIVERSITY LATEX , Iran, Tehran</b></p> <ul style="list-style-type: none"> <li>➢ <b>Developed</b> web software for compiling and editing LaTeX documents with a Node.js backend and Angular/React frontend.</li> <li>➢ <b>Integrated</b> WebSocket technology for real-time updates, ensuring seamless communication between users.</li> <li>➢ <b>Implemented</b> version control integration to enable efficient collaboration and document tracking.</li> </ul> <div data-bbox="344 1596 1057 1617" style="display: flex; justify-content: space-around; gap: 10px;"> <span>Node.js</span> <span>React.js</span> <span>Angular</span> <span>Pug</span> <span>MongoDB</span> <span>Redis</span> <span>Docker</span> <span>Bootstrap</span> </div>
July 2024 January 2025	<p><b>Full-Stack Developer,  TEX READY (UNDER DEVELOPMENT) , Iran, Tehran</b></p> <ul style="list-style-type: none"> <li>➢ <b>Developed</b> LaTeX editing software using a Node.js and Go backend with an Angular and React frontend.</li> <li>➢ <b>Incorporated</b> real-time features like OT and grammar-check algorithms, enhancing the editing experience.</li> <li>➢ <b>Designed</b> a cloud-based architecture for multi-user collaboration, ensuring scalability.</li> </ul> <div data-bbox="344 1797 1078 1818" style="display: flex; justify-content: space-around; gap: 10px;"> <span>Go</span> <span>React.js</span> <span>MongoDB</span> <span>Redis</span> <span>Bazel</span> <span>Docker</span> <span>Material UI</span> <span>Tailwind CSS</span> </div>
May 2024 June 2024	<p><b>Linux System Administrator,  TASMIM PORTFOLIO MANAGEMENT , Iran, Tehran</b></p> <ul style="list-style-type: none"> <li>➢ <b>Automated</b> DevOps processes with Bash scripts, improving deployment efficiency.</li> <li>➢ <b>Maintained</b> server infrastructure for optimal performance and uptime.</li> <li>➢ <b>Configured</b> an enterprise mail server to ensure secure communication.</li> </ul> <div data-bbox="344 1974 719 1995" style="display: flex; justify-content: space-around; gap: 10px;"> <span>Linux</span> <span>Bash</span> <span>MailU</span> <span>Docker</span> <span>Nginx</span> </div>

October 2023 Present	<b>Full-Stack Developer &amp; DevOps,  CONNECT ISTI , Iran, Tehran</b>
	<ul style="list-style-type: none"> <li>➢ <b>Developed</b> web software using Django, improving system performance, query speed, and security.</li> <li>➢ <b>Managed</b> Linux servers and established continuous delivery pipelines to streamline updates.</li> <li>➢ <b>Collaborated</b> on UI/UX enhancements, ensuring intuitive design and user experience.</li> <li>➢ <b>Refactored</b> code structures, enhancing maintainability and scalability.</li> <li>➢ <b>Optimized</b> database designs for new features, improving system functionality.</li> </ul>
	<span>Django</span> <span>Django Rest Framework</span> <span>Linux</span> <span>Fomantic UI</span> <span>Alpine.js</span> <span>JS</span> <span>PostgreSQL</span> <span>Redis</span> <span>GitLab CI/CD</span> <span>GitLab</span>
August 2023 September 2024	<b>Full-Stack Developer &amp; DevOps,  HUMMERS LEASING , Iran Tehran</b>
	<ul style="list-style-type: none"> <li>➢ <b>Developed</b> an enterprise leasing management platform with Django and Bootstrap/HTMX for the front-end.</li> <li>➢ <b>Implemented</b> a robust ABAC (Attribute-Based Access Control) system for enhanced feature management.</li> <li>➢ <b>Automated</b> documentation generation using LaTeX for consistency.</li> <li>➢ <b>Collaborated</b> on UI/UX designs, ensuring a smooth and responsive user experience.</li> </ul>
	<span>Django</span> <span>HTMX</span> <span>JS</span> <span>Linux</span> <span>Bootstrap</span> <span>Tabler</span> <span>CoCalc</span> <span>LATEX</span> <span>Alpine.js</span> <span>Redis</span> <span>Moodle</span> <span>GitLab</span> <span>Selenium</span>
February 2023 June 2024	<b>Linux System Administrator,  HUMMERS BROKER , Iran, Tehran</b>
	<ul style="list-style-type: none"> <li>➢ <b>Automated</b> DevOps processes with Bash scripts, improving efficiency in maintenance tasks.</li> <li>➢ <b>Maintained</b> server infrastructure to ensure optimal performance and minimized downtime.</li> <li>➢ <b>Configured</b> and maintained an enterprise mail server for secure internal communications.</li> </ul>
	<span>Linux</span> <span>Bash</span> <span>MailU</span> <span>Docker</span> <span>Nginx</span>
October 2019 February 2023	<b>Open-Source Contributor &amp; Freelancer, SELF EMPLOYER, Iran, Mashhad</b>
	<ul style="list-style-type: none"> <li>➢ <b>Contributed</b> to 15+ open-source Django projects including projects with 1000+ stars to add new functionalities to them and optimize and refactor their codes.</li> <li>➢ <b>Developed</b> and published 3 Django packages on PyPI providing solutions for common challenges in authentication, reporting, and data visualization.</li> <li>➢ <b>Delivered</b> 8 custom web applications for freelance clients using Django and modern frontend frameworks, resulting in an above average improvement in client workflow efficiency.</li> <li>➢ <b>Implemented</b> complex database migration strategies for client legacy systems, successfully transitioning 5+ applications from monolithic to microservice architectures.</li> <li>➢ <b>Provided</b> technical consultation and code reviews for early-stage startups, helping establish software architecture foundations and development practices.</li> <li>➢ <b>Participated</b> in Django community forums and Stack Overflow, earning reputation points by answering questions and sharing solutions to technical challenges.</li> </ul>
	<span>Django</span> <span>FastAPI</span> <span>Flask</span> <span>Elasticsearch</span> <span>Vue.js</span> <span>React.js</span> <span>Docker</span> <span>Node.js</span>

## PROJECTS

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2019 2020	<b>Weather App,  GITHUB</b>
	<ul style="list-style-type: none"> <li>➢ One of my first independently developed applications, created without following any courses.</li> <li>➢ Sleek weather app delivering real-time weather updates, powered by Django and deployed on Heroku.</li> <li>➢ Utilizes a PostgreSQL backend for efficient data management and jQuery for dynamic frontend interactions.</li> <li>➢ Provides a smooth and responsive user experience, with real-time updates and modern design.</li> <li>➢ Demonstrates my ability to build full-fledged applications from scratch, integrating backend reliability with an intuitive interface.</li> </ul>
	<span>Django</span> <span>Heroku</span> <span>Whitenoise</span> <span>JWT</span> <span>Django Allauth</span>

	<b>Rubiks Food,  GitHub</b>
2021	
2022	<ul style="list-style-type: none"> <li>➤ One of my earliest independently developed applications, created without following any courses, inspired by  GrubHub</li> <li>➤ Developed a full-stack web application using Django as the core framework, integrating multiple technologies and tools.</li> <li>➤ Implemented data processing and visualizations using scikit-learn, NumPy, pandas, Chart.js, and Leaflet, including regression analysis and geographic data representation.</li> <li>➤ Deployed the application on Heroku with Docker and docker-compose, managing asynchronous tasks using Celery, Redis, and RabbitMQ.</li> <li>➤ Enabled real-time features with Django Channels and automated notifications via WebPush.</li> <li>➤ Configured Elasticsearch for advanced search capabilities and utilized PostgreSQL with PostGIS for geospatial data handling.</li> <li>➤ Conducted end-to-end testing using Selenium, ensuring the application's reliability and performance.</li> <li>➤ Managed content with Django CMS, enabling easy content updates and maintenance for the blog section.</li> </ul> <div style="display: flex; justify-content: space-around; gap: 10px;"> <span>Django</span> <span>GeoDjango</span> <span>ElasticSearch</span> <span>Redis</span> <span>RabbitMQ</span> <span>Jquery</span> <span>Docker</span> <span>NGINX</span> <span>PostGIS</span> <span>Selenium</span> </div>
2022	<b>Personal Portfolio,  GitHub</b>
2023	<ul style="list-style-type: none"> <li>➤ Developed a full-stack web application with a Django backend and Vue.js frontend, leveraging JWT for authentication.</li> <li>➤ Implemented GraphQL to provide flexible and efficient data queries, with additional support for RSS feeds.</li> <li>➤ Used Docker for containerization and GitHub Actions for continuous integration and deployment.</li> <li>➤ Integrated PostgreSQL as the database, ensuring robust data management and scalability.</li> <li>➤ Wrote extensive test coverage with pytest and utilized Selenium for end-to-end testing, ensuring a reliable user experience.</li> <li>➤ Applied modern best practices and design patterns to ensure maintainability and scalability across the project.</li> </ul> <div style="display: flex; justify-content: space-around; gap: 10px;"> <span>Django</span> <span>Vue.js</span> <span>TailwindCSS</span> <span>GraphQL</span> <span>Docker</span> <span>GitHub Actions</span> <span>NGINX</span> <span>PostgreSQL</span> <span>PyTest</span> <span>Selenium</span> <span>JWT</span> </div>
2022	<b>AZ Iranian Bank Gateways,  GitHub</b>
2023	<ul style="list-style-type: none"> <li>➤ Made significant contributions to this open-source project, enhancing its capabilities and performance for the community.</li> <li>➤ Enhanced Payment Gateway Integration: Improved the integration process with various Iranian bank gateways, optimizing transaction flow and error handling for a smoother user experience.</li> <li>➤ Contributed to fine-tuning settings, such as currency conversion between IRR and IRT, and implemented tracking code mechanisms for better transaction tracing.</li> <li>➤ Assisted in building functionality for multi-bank support, including priority-based fallback mechanisms for increased transaction success rates.</li> <li>➤ Contributed to the development of a flexible callback system, allowing users to customize the response behavior upon successful or failed payments.</li> <li>➤ Participated in creating and managing sample payment systems, enabling developers to test bank gateways effectively without needing to complete actual transactions.</li> </ul> <div style="display: flex; justify-content: space-around; gap: 10px;"> <span>Django</span> </div>
2022	<b>Pezeshkino,  GitHub</b>
2023	<ul style="list-style-type: none"> <li>➤ Developed Pezeshkino, an app connecting patients with doctors, inspired by  Nobat 24 .</li> <li>➤ Enabled online booking and payments for medical appointments, along with user-submitted doctor reviews.</li> <li>➤ Integrated social media for online consultations with doctors.</li> <li>➤ Built with Django and Django Rest Framework for the backend, supporting authentication with Django Allauth and Dj-Rest-Auth.</li> <li>➤ Frontend developed with Vue.js and TypeScript, using Vuex for state management, Vue Router for navigation, and Chart.js for data visualization.</li> <li>➤ Implemented validation and user interface enhancements with Vee-Validate, SweetAlerts2, TailwindCSS, and Flowbite.</li> <li>➤ Utilized Docker and Docker Compose for containerization, Nginx for web server management, and PostgreSQL for database support.</li> </ul> <div style="display: flex; justify-content: space-around; gap: 10px;"> <span>Django</span> <span>GeoDjango</span> <span>JWT</span> <span>Vue.js</span> <span>Vue Router</span> <span>VueX</span> <span>TailwindCSS</span> <span>Docker</span> <span>NGINX</span> </div>

2023 Present	<b>Python CoCalc,  PyPI</b>
	<ul style="list-style-type: none"> <li>➢ Versatile Python package designed for seamless interaction with the CoCalc API, whether self-hosted or cloud-based.</li> <li>➢ Facilitates the management of CoCalc instances, enabling tasks such as generating persistent and one-time PDFs through API calls.</li> <li>➢ Empowers developers to automate and integrate CoCalc functionalities into their applications with ease.</li> <li>➢ Enhances productivity and workflow efficiency by streamlining CoCalc management and integration.</li> </ul>
	<span>Python</span>
2023 Present	<b>Django Finnotech,  PyPI</b>
	<ul style="list-style-type: none"> <li>➢ Django package designed for seamless integration with Finnotech, a leading Iranian provider of banking services.</li> <li>➢ Utilizes Django's caching framework and session management for efficient handling of OTPs and other Finnotech functionalities.</li> <li>➢ Empowers developers to build secure and high-performance applications that interact smoothly with Finnotech's services.</li> <li>➢ Optimized for reliable banking service integration, enhancing both functionality and user experience.</li> </ul>
	<span>Django</span>
2023 Present	<b>Django Flex Menu,  PyPI</b>
	<ul style="list-style-type: none"> <li>➢ Versatile Django package designed for building dynamic website menus, including both navbars and sidebars.</li> <li>➢ Integrates robust access management through django-waffle for secure and flexible menu control.</li> <li>➢ Emphasizes developer experience with comprehensive Django template tags, streamlining menu implementation.</li> <li>➢ Supports multilingual menu items, allowing developers to manage menu titles in multiple languages effortlessly.</li> <li>➢ Enhances user accessibility and localization, ensuring menus adapt to diverse linguistic requirements without losing clarity or usability.</li> </ul>
	<span>Django</span> <span>Alpine.js</span> <span>xlwt</span> <span>django-waffle</span>
2023 Present	<b>Django Flex Report,  PyPI</b>
	<ul style="list-style-type: none"> <li>➢ Robust Django package designed for seamless report generation with an array of powerful features.</li> <li>➢ Excels in advanced and rapid search capabilities to facilitate efficient data retrieval.</li> <li>➢ Highly adaptable design supporting extensive customization, including versatile access management.</li> <li>➢ Table-level access control and row visibility restrictions based on user roles and attributes for better security and organization.</li> <li>➢ 'Exporters' functionality allowing developers to integrate and register custom exporters, enhancing flexibility.</li> <li>➢ Supports generating reports in various formats like PDFs and Excel sheets, either from comprehensive report objects or specific query sets.</li> <li>➢ Built with Python, Django, Alpine.js, xlwt, and django-waffle for a modern, scalable solution across diverse project requirements.</li> </ul>
	<span>Django</span> <span>Alpine.js</span> <span>xlwt</span> <span>django-waffle</span>
2024 Present	<b>Personal 3D Portfolio,  SAMANZND.COM</b>
	<ul style="list-style-type: none"> <li>➢ Immersive 3D personal portfolio platform under development, featuring cutting-edge 3D models for a rich user experience.</li> <li>➢ Django REST Framework at the core, ensuring efficient API interactions and scalable architecture.</li> <li>➢ JWT-based authentication for secure access and user management.</li> <li>➢ Automated CI/CD pipeline utilizing GitHub hooks, GitHub Actions, Docker, and Jenkins for continuous integration and deployment.</li> <li>➢ Streamlined updates and a robust, scalable infrastructure to support continuous delivery of new features and improvements.</li> <li>➢ Focus on efficient, scalable, and secure application development for a seamless user and developer experience.</li> </ul>
	<span>Next.js</span> <span>Three.js</span> <span>Jenkins</span> <span>Django</span> <span>Django REST Framework</span> <span>JWT</span> <span>PostgreSQL</span> <span>Docker</span>

 LANGUAGES

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Persian



English

