

Saman ZAND HAGHIGHI

Full Stack Engineer | DevOps Engineer

[in linkedin.com/in/saman-zand-h](https://www.linkedin.com/in/saman-zand-h) github.com/saman-zand-h
+98 922 676 1449 / +1 252 628 9199 @samanzandh@gmail.com
samanznd.com







Full Stack Engineer who builds high-throughput, fault-tolerant systems using Django and modern cloud infrastructure. Focused on practical implementation of design patterns to solve specific scaling and transaction challenges. Creator of multiple open-source Django packages with 1000+ downloads. Designed distributed systems handling 30K+ concurrent users while maintaining sub-200ms response times. Consistently refactor complex legacy systems into modular, testable components. Skilled in translating business requirements into technical architecture across web platforms, payment gateways, and data-intensive applications. Currently leveraging Google Cloud services to build reliable serverless infrastructures optimized for cost and performance.

COMPETENCIES

Personal Skills	Innovation, Creativity, Problem Solving, Time management, Team leadership, Fast Learner, Critical Thinking, Communication
Programming Languages	Python, C#, JS/ES, TypeScript, Go, C, GraphQL, Bash
Frameworks	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
Cloud Platforms	AWS, Google Cloud, Microsoft Azure, Hetzner
DBMS	PostgreSQL, MySQL, Redis, MongoDB, Cassandra DB, Neo4j, MSSQL
Development Tools	Git, GitLab, GitHub, RabbitMQ, Kafka, Docker
Operating Systems	Ubuntu Server/Desktop, Windows
Others	LaTeX, Software Architecture, NGINX, CoCalc, Moodle, Google Sheets, ML/DL, LLM, CI/CD, Violin

WORK EXPERIENCES

October 2024 Present	Back-End Developer & Founding Member, CANADA PRIME JOBS, Vancouver, Canada <ul style="list-style-type: none">➤ Pioneered 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.➤ Leveraged Strategy design pattern to develop a flexible algorithm selection system, enabling dynamic processing based on data characteristics and improving processing efficiency.➤ Innovated new pub/sub systems for better performance on Django, along with multi-container processes to optimize resource management.➤ Developed a notification system for managing campaigns, allowing efficient communication and tracking for marketing efforts.➤ Deployed cloud infrastructure using Terraform, managing PostgreSQL, Django, Redis, load balancers, storage, and other necessary services in Google Cloud, following a fully cloud-native approach.➤ Integrated AI-based processing using OpenAI API and Vertex AI to enhance various business processes and optimize decision-making.➤ Architected robust software components using advanced design patterns, creating maintainable and extensible systems that reduced technical debt by 35% and accelerated feature development cycles.➤ Implemented Saga design pattern for distributed pub/sub transactions, ensuring atomicity across microservices and reducing system failures by 35% during high-traffic periods.➤ Designed event-driven architecture with Observer pattern for notification systems, enabling real-time campaign updates and improving client response rates by 32%. <div><div>Django</div><div>GraphQL</div><div>UI/UX Design</div><div>PostgreSQL</div><div>Redis</div><div>Docker</div><div>GitLab CI/CD</div><div>Terraform</div><div>Google Cloud</div></div>
-------------------------	---

September 2024 Present	<p>Technical Lead, Full-Stack Developer & DevOps,  AI RODO , Vancouver, Canada</p> <ul style="list-style-type: none"> ➤ Led a team to deliver a scalable, production-ready application. ➤ Managed the codebase, ensuring quality and scalability across frontend and backend. ➤ Architected serverless infrastructure with Google Cloud services (Cloud Run, MemoryStore, SQL, Scheduler, Pub/Sub). ➤ Streamlined deployments with CI/CD pipelines using GitLab and Google Cloud Build. ➤ Containerized the project for consistent environments. ➤ Integrated OpenAI assistants and Whisper for AI-driven features. ➤ Developed an efficient and flexible web scraping mechanism. ➤ Contributed to a user-friendly landing page with WordPress Elementor. <p>Django Next.js Tailwind CSS TypeScript Docker GitLab CI/CD Google Cloud WordPress</p>
August 2024 Present	<p>Full-Stack Developer,  ZUMRA GROUP , Dubai, UAE</p> <ul style="list-style-type: none"> ➤ Developed a travel and tourism services platform to streamline bookings and enhance customer experience. ➤ Engineered a scalable backend system using ASP.NET Web-API, incorporating Kafka and architecture principles to ensure efficiency. ➤ Created a modular Telegram bot using Python-Telegram-Bot, optimized for payment task efficiency and maintainability. <p>ASP.NET Python-Telegram-Bot Kafka MSSQL Redis</p>
July 2024 Present	<p>Full-Stack Developer,  SHARIF UNIVERSITY LATEX , Iran, Tehran</p> <ul style="list-style-type: none"> ➤ Developed web software for compiling and editing LaTeX documents with a Node.js backend and Angular/React frontend. ➤ Integrated WebSocket technology for real-time updates, ensuring seamless communication between users. ➤ Implemented version control integration to enable efficient collaboration and document tracking. <p>Node.js React.js Angular Pug MongoDB Redis Docker Bootstrap</p>
July 2024 Present	<p>Full-Stack Developer,  TEX READY (UNDER DEVELOPMENT) , Iran, Tehran</p> <ul style="list-style-type: none"> ➤ Developed LaTeX editing software using a Node.js and Go backend with an Angular and React frontend. ➤ Incorporated real-time features like OT and grammar-check algorithms, enhancing the editing experience. ➤ Designed a cloud-based architecture for multi-user collaboration, ensuring scalability. <p>Go React.js MongoDB Redis Bazel Docker Material UI Tailwind CSS</p>
May 2024 June 2024	<p>Linux System Administrator,  TASMIM PORTFOLIO MANAGEMENT , Iran, Tehran</p> <ul style="list-style-type: none"> ➤ Automated DevOps processes with Bash scripts, improving deployment efficiency. ➤ Maintained server infrastructure for optimal performance and uptime. ➤ Configured an enterprise mail server to ensure secure communication. <p>Linux Bash MailU Docker Nginx</p>
October 2023 Present	<p>Full-Stack Developer & DevOps,  CONNECT ISTI , Iran, Tehran</p> <ul style="list-style-type: none"> ➤ Developed web software using Django, improving system performance, query speed, and security. ➤ Managed Linux servers and established continuous delivery pipelines to streamline updates. ➤ Collaborated on UI/UX enhancements, ensuring intuitive design and user experience. ➤ Refactored code structures, enhancing maintainability and scalability. ➤ Optimized database designs for new features, improving system functionality. <p>Django Django ReST Framework Linux Fomantic UI Alpine.js JS PostgreSQL Redis GitLab CI/CD GitLab</p>
August 2023 September 2024	<p>Full-Stack Developer & DevOps,  HUMMERS LEASING , Iran Tehran</p> <ul style="list-style-type: none"> ➤ Developed an enterprise leasing management platform with Django and Bootstrap/HTMX for the frontend. ➤ Implemented a robust ABAC (Attribute-Based Access Control) system for enhanced feature management. ➤ Automated documentation generation using LaTeX for consistency. ➤ Collaborated on UI/UX designs, ensuring a smooth and responsive user experience. <p>Django HTMX JS Linux Bootstrap Tabler CoCalc LaTeX Alpine.js Redis Moodle GitLab Selenium</p>
August 2023 June 2024	<p>Linux System Administrator,  HUMMERS BROKER , Iran, Tehran</p> <ul style="list-style-type: none"> ➤ Automated DevOps processes with Bash scripts, improving efficiency in maintenance tasks. ➤ Maintained server infrastructure to ensure optimal performance and minimized downtime. ➤ Configured and maintained an enterprise mail server for secure internal communications. <p>Linux Bash MailU Docker Nginx</p>

October 2019
August 2023

Open-Source Contributor & Freelancer, SELF EMPLOYER, Iran, Mashhad

- **Contributed** to 15+ open-source Django projects including projects with 1000+ stars to add new functionalities to them and optimize and refactor their codes.
- **Developed** and published 3 Django packages on PyPI providing solutions for common challenges in authentication, reporting, and data visualization.
- **Delivered** 8 custom web applications for freelance clients using Django and modern frontend frameworks, resulting in an above average improvement in client workflow efficiency.
- **Implemented** complex database migration strategies for client legacy systems, successfully transitioning 5+ applications from monolithic to microservice architectures.
- **Provided** technical consultation and code reviews for early-stage startups, helping establish software architecture foundations and development practices.
- **Participated** in Django community forums and Stack Overflow, earning reputation points by answering questions and sharing solutions to technical challenges. Django GraphQL PostgreSQL Redis Docker GitHub Actions Git AWS Linux

Django FastAPI Flask Elasticsearch Vue.js React.js Docker Node.js



PROJECTS

2019
2020

Weather App, [GitHub](#)

- One of my first independently developed applications, created without following any courses.
- Sleek weather app delivering real-time weather updates, powered by Django and deployed on Heroku.
- Utilizes a PostgreSQL backend for efficient data management and jQuery for dynamic frontend interactions.
- Provides a smooth and responsive user experience, with real-time updates and modern design.
- Demonstrates my ability to build full-fledged applications from scratch, integrating backend reliability with an intuitive interface.

Django Heroku Whitenoise JWT Django Allauth

2021
2022

Rubiks Food, [GitHub](#)

- One of my earliest independently developed applications, created without following any courses, inspired by [GrubHub](#)
- Developed a full-stack web application using Django as the core framework, integrating multiple technologies and tools.
- Implemented data processing and visualizations using scikit-learn, NumPy, pandas, Chart.js, and Leaflet, including regression analysis and geographic data representation.
- Deployed the application on Heroku with Docker and docker-compose, managing asynchronous tasks using Celery, Redis, and RabbitMQ.
- Enabled real-time features with Django Channels and automated notifications via WebPush.
- Configured Elasticsearch for advanced search capabilities and utilized PostgreSQL with PostGIS for geospatial data handling.
- Conducted end-to-end testing using Selenium, ensuring the application's reliability and performance.
- Managed content with Django CMS, enabling easy content updates and maintenance for the blog section.

Django GeoDjango Elasticsearch Redis RabbitMQ JQuery Docker NGINX PostGIS Selenium

2022
2023

Personal Portfolio, [GitHub](#)

- Developed a full-stack web application with a Django backend and Vue.js frontend, leveraging JWT for authentication.
- Implemented GraphQL to provide flexible and efficient data queries, with additional support for RSS feeds.
- Used Docker for containerization and GitHub Actions for continuous integration and deployment.
- Integrated PostgreSQL as the database, ensuring robust data management and scalability.
- Wrote extensive test coverage with pytest and utilized Selenium for end-to-end testing, ensuring a reliable user experience.
- Applied modern best practices and design patterns to ensure maintainability and scalability across the project.

Django Vue.js TailwindCSS GraphQL Docker GitHub Actions NGINX PostgreSQL PyTest Selenium JWT

2022 2023	AZ Iranian Bank Gateways,  GitHub <ul style="list-style-type: none"> ➤ Made significant contributions to this open-source project, enhancing its capabilities and performance for the community. ➤ Enhanced Payment Gateway Integration: Improved the integration process with various Iranian bank gateways, optimizing transaction flow and error handling for a smoother user experience. ➤ Contributed to fine-tuning settings, such as currency conversion between IRR and IRT, and implemented tracking code mechanisms for better transaction tracing. ➤ Assisted in building functionality for multi-bank support, including priority-based fallback mechanisms for increased transaction success rates. ➤ Contributed to the development of a flexible callback system, allowing users to customize the response behavior upon successful or failed payments. ➤ Participated in creating and managing sample payment systems, enabling developers to test bank gateways effectively without needing to complete actual transactions. <div>Django</div>
2022 2023	Pezeshkino,  GitHub <ul style="list-style-type: none"> ➤ Developed Pezeshkino, an app connecting patients with doctors, inspired by  Nobat 24 . ➤ Enabled online booking and payments for medical appointments, along with user-submitted doctor reviews. ➤ Integrated social media for online consultations with doctors. ➤ Built with Django and Django Rest Framework for the backend, supporting authentication with Django Allauth and Dj-Rest-Auth. ➤ Frontend developed with Vue.js and TypeScript, using Vuex for state management, Vue Router for navigation, and Chart.js for data visualization. ➤ Implemented validation and user interface enhancements with Vee-Validate, SweetAlerts2, TailwindCSS, and Flowbite. ➤ Utilized Docker and Docker Compose for containerization, Nginx for web server management, and PostgreSQL for database support. <div>Django GeoDjango JWT Vue.js Vue Router Vuex TailwindCSS Docker NGINX</div>
2023 Present	Python CoCalc,  PyPI <ul style="list-style-type: none"> ➤ Versatile Python package designed for seamless interaction with the CoCalc API, whether self-hosted or cloud-based. ➤ Facilitates the management of CoCalc instances, enabling tasks such as generating persistent and one-time PDFs through API calls. ➤ Empowers developers to automate and integrate CoCalc functionalities into their applications with ease. ➤ Enhances productivity and workflow efficiency by streamlining CoCalc management and integration. <div>Python</div>
2023 Present	Django Finnotech,  PyPI <ul style="list-style-type: none"> ➤ Django package designed for seamless integration with Finnotech, a leading Iranian provider of banking services. ➤ Utilizes Django's caching framework and session management for efficient handling of OTPs and other Finnotech functionalities. ➤ Empowers developers to build secure and high-performance applications that interact smoothly with Finnotech's services. ➤ Optimized for reliable banking service integration, enhancing both functionality and user experience. <div>Django</div>
2023 Present	Django Flex Menu,  PyPI <ul style="list-style-type: none"> ➤ Versatile Django package designed for building dynamic website menus, including both navbars and sidebars. ➤ Integrates robust access management through django-waffle for secure and flexible menu control. ➤ Emphasizes developer experience with comprehensive Django template tags, streamlining menu implementation. ➤ Supports multilingual menu items, allowing developers to manage menu titles in multiple languages effortlessly. ➤ Enhances user accessibility and localization, ensuring menus adapt to diverse linguistic requirements without losing clarity or usability. <div>Django Alpine.js xlwt django-waffle</div>

2023 Present	Django Flex Report,  PyPI <ul style="list-style-type: none"> ➤ Robust Django package designed for seamless report generation with an array of powerful features. ➤ Excels in advanced and rapid search capabilities to facilitate efficient data retrieval. ➤ Highly adaptable design supporting extensive customization, including versatile access management. ➤ Table-level access control and row visibility restrictions based on user roles and attributes for better security and organization. ➤ 'Exporters' functionality allowing developers to integrate and register custom exporters, enhancing flexibility. ➤ Supports generating reports in various formats like PDFs and Excel sheets, either from comprehensive report objects or specific query sets. ➤ Built with Python, Django, Alpine.js, xlwt, and django-waffle for a modern, scalable solution across diverse project requirements. <div> Django Alpine.js xlwt django-waffle </div>
2024 Present	Personal 3D Portfolio,  SAMANZND.COM <ul style="list-style-type: none"> ➤ Immersive 3D personal portfolio platform under development, featuring cutting-edge 3D models for a rich user experience. ➤ Django REST Framework at the core, ensuring efficient API interactions and scalable architecture. ➤ JWT-based authentication for secure access and user management. ➤ Automated CI/CD pipeline utilizing GitHub hooks, GitHub Actions, Docker, and Jenkins for continuous integration and deployment. ➤ Streamlined updates and a robust, scalable infrastructure to support continuous delivery of new features and improvements. ➤ Focus on efficient, scalable, and secure application development for a seamless user and developer experience. <div> Next.js Three.js Jenkins Django Django REST Framework JWT PostgreSQL Docker </div>

EDUCATION

September 2023 Present	Ferdowsi University of Mashhad (FUM), MASHHAD, Iran <ul style="list-style-type: none"> ➤ Bachelor of Electrical Engineering
---------------------------	---

LANGUAGES

Persian	●	●	●	●	●
English	●	●	●	●	●