# Saman **Zano Haghighi** Full Stack Engineer | DevOps Engineer

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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 opensource 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

ŁTFX, Software Architecture, NGINX, CoCalc, Moodle, Google Sheets, ML/DL, LLM, CI/CD, Violin



### WORK EXPERIENCES

Others

### October 2024 Present

# Back-End Developer & Founding Member, O CANADA PRIME JOBS, Vancouver, Canada

- Spearheaded the design and architecture of the software system using Django and GraphQL for seamless scalability and performance.
- 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 Al-based processing using OpenAl API and Vertex Al 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

Django GraphQL UI/UX Design PostgreSQL Redis Docker GitLab CI/CD Terraform Google Cloud

### September 2024 Present

# Technical Lead, Full-Stack Developer & DevOps, OP AI RODO, Vancouver, Canada

- **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.

Django Next.js Tailwind CSS TypeScript Docker GitLab CI/CD Google Cloud WordPress

### August 2024 Present

# Full-Stack Developer, & ZUMRA GROUP, Dubai, UAE

- Developed a travel and tourism services platform to streamline bookings and enhance customer experi-
- 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.

ASP.NET Python-Telegram-Bot Kafka MSSQL Redis

### July 2024 Present

# Full-Stack Developer, Sharif University LaTeX , Iran, Tehran

- 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
- Implemented version control integration to enable efficient collaboration and document tracking. Node.js React.js Angular Pug MongoDB Redis Docker Bootstrap

### July 2024 Present

# Full-Stack Developer, • TEX READY (UNDER DEVELOPMENT), Iran, Tehran

- 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.

Go React.js MongoDB Redis Bazel Docker Material UI Tailwind CSS

# May 2024

# Linux System Administrator, & TASMIM PORTFOLIO MANAGEMENT, Iran, Tehran

- June 2024
  - 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.

Linux Bash MailU Docker Nginx

# October 2023 Present

# Full-Stack Developer & DevOps, O CONNECT ISTI, Iran, Tehran

- **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.

Django | Django ReST Framework | Linux | Fomantic UI | (Alpine.js ) | JS | PostgreSQL | Redis | GitLab CI/CD | GitLab

# August 2023 September 2024

# Full-Stack Developer & DevOps, HUMMERS LEASING , Iran Tehran

- Developed an enterprise leasing management platform with Django and Bootstrap/HTMX for the fron-
- 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.

Django HTMX JS Linux Bootstrap Tabler CoCalc LITEX Alpine.js Redis Moodle GitLab Selenium

### August 2023 June 2024

# Linux System Administrator, **O** HUMMERS BROKER , Iran, Tehran

- ➤ 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. Linux Bash MailU Docker Nginx



# 2019 | Weather App, **О** GITHUВ

2020

- > 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 Rubiks Food, & GITHUB

2022 National Toda, Common and Co

- > 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 | Personal Portfolio, 🔗 GITHUВ

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 | AZ Iranian Bank Gateways, 🔗 GITHUВ

- ➤ 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.

Django

2023

#### 2022 Pezeshkino, GITHUB

#### 2023

- ➤ Developed Pezeshkino, an app connecting patients with doctors, inspired by **𝚱** Nobat 24 .
- > Enabled online booking and payments for medical appointments, along with user-submitted doctor re-
- > 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. is 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.

Django GeoDjango JWT Vue.js Vue Router VueX TailwindCSS Docker NGINX

#### 2023 Present

# Python CoCalc, **O** PyPI

- > 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 onetime 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.

### 2023 Present

# Django Finnotech, 🔗 PYPI

- > Django package designed for seamless integration with Finnotech, a leading Iranian provider of banking
- > 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. Django

### 2023

# Django Flex Menu, **O** PyPI

#### Present

- > Versatile Diango package designed for building dynamic website menus, including both navbars and
- Integrates robust access management through django-waffle for secure and flexible menu control.
- > Emphasizes developer experience with comprehensive Django template tags, streamlining menu imple-
- > 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.

Django Alpine.js xlwt django-waffle

### 2023 Present

# Django Flex Report, & PyPI

- > 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.

Django Alpine.js xlwt django-waffle

# 2024

# Personal 3D Portfolio, SAMANZND.COM

# Present

- > 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.

Next.js Three.js Jenkins Django Django REST Framework JWT PostgreSQL Docker



# **EDUCATION**

September 2023 | Ferdowsi University of Mashhad (FUM), MASHHAD, Iran **Present** | > Bachelor of Electrical Engineering

# A LANGUAGES

Persian English







