

MAHSA FATHI

Software Engineer

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SUMMARY

Motivated and versatile professional with a strong background in developing in Python and Golang. Proficient in Django, FastAPI and net/http backend development, Celery, gRPC, Docker, CI/CD. Skilled in using tools like NATS, Kafka, and Redis. Committed to continuous learning and staying up-to-date with the latest industry trend. With a research background in Natural Language Processing and Deep Learning, I bring innovative problem-solving skills and a strong ability for collaborating with interdisciplinary teams.

WORK EXPERIENCE

FOOTBALL360

Tehran, Iran

Full-Time Backend Developer

Feb. 2024-Present

- Used Django platform for developing Rest APIs.
- Used Golang to develop a microservice for receiving updates from NATS Jetstream and perform changes on database.
- Deployed NATS infrastructure with Jetstream.
- Used net/http in Golang to develop a RESTful API microservice with hexagonal architecture.
- Used ScyllaDB for modeling user subscriptions.
- Developed gRPC servers on multiple Django microservices.
- Developed a backend-for-frontend project in Golang to gather information from other microservices using gRPC.
- Used goroutines to concurrently gather information for BFF API responses.
- Used headless service for gRPC deployment on Kubernetes to handle load balance.
- Developed CI/CD for Golang projects with tests and golangci-lint.
- Used APM for logging Golang APIs.

TABDEAL CRYPTO EXCHANGE

Tehran, Iran

Full-Time Backend Developer

Aug. 2023-Jan. 2024

- Used Django platform for developing Rest APIs.
- Used Celery Beat and Celery async tasks for handling jobs in Django project.
- Handling race conditions with atomic transactions and locking data in Django.
- Used OOP to organize groups for Django admin accessibilities to actions and views for different technical teams with developing class-based permission groups.
- Showing history of users isolated margin positions in their profile.
- Implemented Vandar APIs to deposit money with payment id.
- Practicing clean code and PEP-8 in python.
- Using unit-testing for checking functions health.
- Deployed a demo for the main website in a Linux host using docker.

AURELIUS

Tehran, Iran

Part-Time Backend Developer

Jul. 2023-Feb. 2024

- Used Fast API to develop RESTful APIs.
- Used SQLAlchemy ORM for queries in PostgreSQL database.
- Used alembic to handle database migrations in FastAPI project.
- Used Poetry for dependency management in python.
- Designing database schema for cap table microservice in Aurelius.
- Calculating cap table (stakeholder shares) based on transaction events, fund raisings, funding rounds, granting employees, and other events.

KILID (HOUSIFY) COMPANY

Tehran, Iran

Data Engineer/ Data Scientist

Aug. 2021-Jul. 2023

Housify is an international real estate website, and its version for Iran is called Kilid.

- Used Apache Airflow to create DAGs for publishing crawled data into our website.
- Used supervisor on a Linux server to track stream data procedures.

- Multi-source duplicate detection using XGBoost algorithm.
- Deployed fast-api for duplicate detection project.
- Setting up dockerized Kafka and Kafka-UI for project goals.
- Refactored the crawling stream project to use Kafka instead of Redis. Using multiple consumers to distribute processing.
- All projects were dockerized and deployed using docker-compose.
- Developed a stream project using Redis to crawl different property listing websites to get listing data in different countries.
- Developed a machine learning algorithm to detect agencies from owners of properties, using only the description of the listing, therefore, using natural language processing techniques, feature extraction, and machine learning.
- Used DVC to connect AI models, training process, and loading the model.

DARYA FANAVAR BORHAN SHARIF COMPANY

Tehran, Iran

Web Developer Internship

Jun. 2018-Aug. 2018

- Improved existing website properties for an airline, resulting in better performance and user experience in site.
- Created and built mobile-friendly websites and transitioned legacy site mobile-friendly platform.
- Developed unique website to strengthen company brand and identity.
- Used C# for backend and HTML, CSS, AngularJs and JavaScript for frontend.

EDUCATION

NODET HIGH SCHOOL

Abadan, Iran

High School Diploma in Mathematics and Physics

2010-2016

NODET schools stand for and are under the control of the "National Organization for Development of Exceptional Talents" in Iran.

SHARIF UNIVERSITY OF TECHNOLOGY

Tehran, Iran

Bachelor of Science, Major in Aerospace Engineering; Minor in Computer Science

2016-2020

Thesis: Studying the feasibility of using dialogue systems as an aerospace educator

About Thesis: Designed a QA to answer aerospace related questions using a sequence-to-sequence model with Bahdanau attention mechanism, and GRU gates.

AMIRKABIR UNIVERSITY OF TECHNOLOGY

Tehran, Iran

Master of Science (INCOMPLETE), Major in Computer Engineering-Artificial Intelligence

2021-2023

SKILLS

- Programming Languages: Python, Golang
- Backend: Django, Django rest framework, FastAPI, net/http, gRPC, SQLAlchemy ORM, Django ORM, Test-Driven Development (TDD), Unit Testing, Integration Testing, Celery beat, Celery async tasks, alembic, Poetry, APM
- DevOps Engineering: Docker, Git, Basic CI/CD, Kubernetes
- Database Management: PostgreSQL, MySQL, Clickhouse, ScyllaDB
- Data Engineering: Redis, RabbitMQ, NATS, Kafka
- Web Crawling: RESTful API, Selenium, BeautifulSoup