

Mahmoud Masih Tehrani

Principal Software Engineer | Blockchain & FinTech Staff Technical Lead

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Professional Summary

Highly accomplished **Technical Leader** with over 12 years of expertise in **Fintech, Blockchain, E-commerce, and GIS**. Proven success in architecting scalable **microservice systems**, leading **distributed engineering teams**, and driving technical excellence. Expert in aligning technical strategy with business goals, fostering innovation in **cryptocurrency, IoT, and distributed systems**, and consistently delivering high-impact solutions.

Core Competencies & Technical Skills

Category	Skills
Technical Leadership	Team Leadership, Mentoring, Stakeholder Communication, Sprint Planning, System Design, Distributed Team Management
Programming	Golang , PHP, Python, C/C++, Solidity
Databases & Caching	PostgreSQL (PostGIS) , MySQL (Percona), MariaDB, Redis , Elasticsearch, Azure Cosmos DB, LevelDB
Infrastructure & Tools	RabbitMQ , gRPC, MQTT, OpenResty, ProxySQL, LDAP, SaltStack, Docker , MikroTik, Kubernetes
Architecture	Microservices , Distributed Systems, Clean Architecture, SOLID, Sharding, Caching, Event-Driven Architecture, Blockchain Architecture
Domains	Fintech, Cryptocurrency, Blockchain , E-commerce, GIS, AdTech, IoT , Real World Assets (RWA)

Education

- **M.S. in Information Technology (IT)** | Islamic Azad University, Science and Research Branch (Ongoing)
- **B.S. in Information & Communication Technology (ICT)** | Isfahan University of Technology (2012)

Professional Experience

Pishtaz Simorgh (Cryptocurrency & Fintech) | Staff Technical Lead (Sep 2024 – Present)

Software development accelerator specializing in Fintech and Blockchain solutions.

- **Projects:** Bitbank (CEX/DEX Crypto Exchange), TALA (Gold Tokenization Platform), SimPay (Rial Payment Solution)
- **Key Achievements:**
 - **Led cross-functional teams** across Iran, Turkey, China, and England, delivering scalable platforms.
 - **Architected automated trading bots** (Pricing, Arbitrage, Rebalance) to enhance platform efficiency and profitability by **25%**.
 - Designed and implemented **KYC and Rial payment systems** with Mehr Bank, ensuring compliance.
 - **Mentored 15+ engineers**, fostering technical excellence and leadership growth.
- **Key Responsibilities:**
 - Defined technical roadmaps and oversaw agile sprint planning for three major projects.
 - Managed stakeholder negotiations, aligning technical deliverables with business objectives.
- **Stack:** Golang, PostgreSQL, Microservices, Team Leadership, Cryptocurrency

Eways (B2B E-commerce) | Senior Software Engineer (Nov 2022 – Mar 2024)

Premier B2B e-commerce platform for electronics in the MENA region.

- **Projects:** Wholesale Platform, Warehouse Management System (WMS)
- **Key Achievements:**
 - Led backend development of a high-throughput wholesale platform, reducing transaction latency by **30%**.
 - Engineered a WMS, automating inventory processes and cutting fulfillment times by **20%**.
 - **Mentored 10 engineers**, establishing API best practices and code review processes.
- **Key Responsibilities:**
 - **Architected scalable backend systems** using **Golang** and **PostgreSQL**.
 - Coordinated with stakeholders to ensure platform reliability and performance.
- **Stack:** Golang, PostgreSQL, API, Swagger, Team Leadership

Digikala (E-commerce) | Senior Software Engineer (Jun 2022 – Nov 2022)

Largest e-commerce platform in the MENA region.

- **Projects:** User Administration Database, Service Automation (Redis, MySQL Percona, Elasticsearch)

- **Key Achievements:**
 - Built a centralized user administration database using **Python** and **LDAP**, managing **40+ servers**.
- **Key Responsibilities:**
 - Designed secure database integrations with **ProxySQL** and **LDAP**.
 - Optimized service reliability through automated monitoring and replication.
- **Stack:** Python, MySQL (Percona), ProxySQL, LDAP, Redis, Elasticsearch

ID-Pay (Fintech) | Head of Backend Engineering (Principal Level) (Sep 2019 – Mar 2022)

Internet payment gateway with 500,000+ users.

- **Projects:** Microservices Transition, Electronic Wallet Development, Financial Super-App
- **Key Achievements:**
 - Led migration to **Golang microservices**, improving system performance by **40%**.
 - Developed an **electronic wallet** system.
 - Secured contracts with various entities, including Mashhad and Semnan Municipalities.
 - Designed and implemented a financial **super-app** offering electronic bill payment, card-to-card transfers with **38 different banks**, and vehicle violation inquiry.
- **Key Responsibilities:**
 - **Hired and scaled a 12-person Golang team**, implementing agile workflows.
 - Provided strategic technical guidance to align product roadmap with business goals.
- **Stack:** Golang, MariaDB, Postgres, Redis, Go-Kit, RabbitMQ, gRPC, Arduino, C/C++, MQTT, Fintech, Payment Systems, Microservices, Team Leadership

Map.ir (GIS Services) | Head of Backend Team (Aug 2017 – May 2018)

Startup specializing in GIS-based projects.

- **Key Achievements:**
 - Led development of comprehensive **GIS services**, enabling real-time geocoding for **1M+ queries daily**.
 - Delivered **G-Naf code system** for Iran Post, significantly improving address accuracy and nationwide postal efficiency based on advanced GIS principles.
- **Key Responsibilities:**
 - **Hired and managed a 6-person backend team**, driving agile delivery for GIS-centric projects.
 - Advised leadership on technical strategy and feasibility within the GIS domain.
- **Stack:** PHP, Redis, Postgres, **PostGIS**, Elasticsearch, LUA, OpenResty, GIS, Geocoding

Click-Yab (AdTech) | Senior Staff Engineer / Technical Lead (Jun 2014 – Jul 2017)

Advertising system serving 60M+ ad impressions daily.

- **Key Achievements:**
 - Optimized ad-serving efficiency by **reducing database queries to zero** using **MapReduce**, a critical improvement for high-volume advertising.
 - Led migration to **Golang**, improving system scalability by **50%** to handle increased ad impressions.
- **Key Responsibilities:**
 - Managed technical team and defined scalable architecture tailored for online advertising.
 - Advised on business-aligned technical strategies within the AdTech domain.
- **Stack:** PHP, MySQL, Golang, Redis, RabbitMQ, Map-Reduce, AdTech, Advertising Systems, and Scalability

DABA IDP (Network & VoIP) | Software Programmer (Aug 2013 – Sep 2014)

Daba Center provides some services based on the network and VOIP.

- **Key Achievements:**
 - Developed a network management portal, automating client access for a network and VoIP service provider. This included managing internet distribution for free zones and comprehensive management of MikroTik devices and user accounts.
- **Stack:** PHP, MySQL, MikroTik

Selected Freelance Engagements

- **BitBoneh (RWA Platform) | Blockchain Architect | 2025**
 - Architected and developed a **Real World Asset (RWA) tokenization platform** on the **Binance Smart Chain**.
 - Led the implementation of versionable, DEX-compatible **Solidity** smart contracts for tokenizing agricultural assets (saffron, rice, meat).
- **NexuRing (Health-Tech) | Backend Software Engineer | 2024**
 - Architected and implemented a scalable **Golang-based backend** for real-time health data analysis.
- **Blockchain from Scratch (R&D) | Lead Engineer | 2022**
 - Headed R&D to build a proprietary, **Ethereum-inspired blockchain using Golang**.
 - Implemented core components, including **P2P network**, consensus mechanism, and minting logic, utilizing **LevelDB**.
- **Contactless IoT Payment System | Lead Engineer | 2021**
 - Led end-to-end design and development of a **contactless IoT Payment System**.
 - Engineered the solution using **embedded devices (Arduino)** in **C/C++** with

NFC/QR capabilities, communicating in real-time over a secure **MQTT network**.

- **Fun Facts (AI Platform) | Full-Stack Software Engineer | 2019**
 - Developed an **AI-driven** recommendation platform using **Python**, leveraging **Azure Cosmos DB** and the **Gremlin** API to query graph data
- **Shop Making E-commerce Platform (Shop Making) | Lead Engineer | 2018**
 - Designed the architecture for a scalable commerce platform.
 - Managed and built a technical team.
 - Implemented database sharding and handled over 20,000 online shops.

Certifications

- **Certified Scrum Master (CSM)** | Scrum.ir
- **LPIC-1**: Linux Professional Institute Certified
- **Linux Essentials**: Professional Development Certificate

Professional References

- **Ahmad Mansouri**: CTO at DABA (Former Colleague). Contact: 09354206621
- **Ali Jazayeri**, CTO at ID-Pay (Former Colleague). Contact: 09356934187
- **Iman Setayeshfar**: Product Manager at Simorgh. Contact: 09358397327

Volunteer Experience

- **Isfahan & Tehran LUG** (Linux Users Group), Organized and presented workshops on Linux system administration for new members.
- **Golang release party**: Co-organized a community event celebrating the release of Golang 1.8, fostering local developer engagement.

Interests

Blockchain Technology, IoT, Artificial Intelligence, Podcast, Hiking, Podcast, Anime