

# KAMYAR MIRZAVAZIRI

Software Engineer

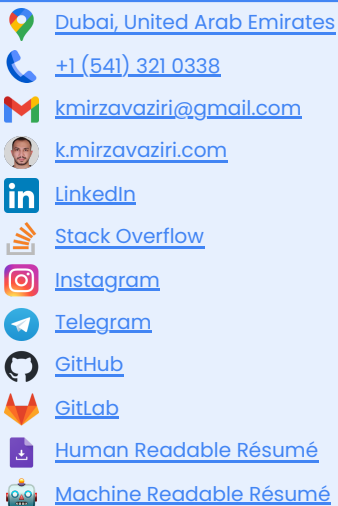
Favorite Tools



## ABOUT ME

- 7+ years experience in software engineering, utilizing 15+ tools, provided a valuable insights into aspects of software engineering.
- The portfolio spanning small startup projects to highly-loaded enterprise apps, helps the development of full-stack apps and improvement and scale of existing ones.

## CONTACT



## EDUCATION



**M.Sc., Computer Science**  
Sharif University of Technology  
2022 - Present



**B.Sc., Computer Science**  
University of Tehran  
2017 - 2022

## LANGUAGES



**English**  
Can speak fluently



**Farsi**  
Native speaker

## WORK EXPERIENCE



### SOFTWARE ENGINEER @ DIVAR

2022 - Present

The biggest Iranian classified ads platform, with 60+ million active users, alternative for eBay in Iran.



- Took a major role in redesigning the Submit micro-service from Python to Go and REST to gRPC, achieved the following.
  - 20% faster development.
  - 99.9% up-time.
  - Sub-100 ms response times (upper 99 percentile).
  - Average response size < 50 KiB (down from > 1 MiB).
  - A notable 10% reduction in call center load.
- Developed an auto-migrator to convert 250+ messy forms to new structured widget forms, estimated to reduce the initial development time by 5 months.
- Optimized the Post Stats micro-service,
  - Reduced service requests from 7K to 200 per second by shifting sync calls to async via Kafka. Improved fault tolerance by storing events during system downtime, preventing data loss experienced with sync calls.
  - Freed up 24 CPU cores and 120 GiB of memory, resulting in a remarkable 66% reduction in consumed resources.
- Enhanced overall service reliability by elevating monthly Uptime from 99.84% to 99.97%, ensuring uninterrupted service availability for customers.
- Managed the PostAPI micro-service, efficiently handling 6K+ requests per second during peak times.
- Optimized CI Pipelines in a monorepo, driving a noteworthy 30% reduction in average pipeline duration, significantly elevating overall developer productivity across the organization.



### FOUNDER & SOFTWARE ENGINEER @ AVISTOPIA

2021 - 2022

Learn-Compete-Work platform (startup).



- Launched a startup with \$50K+ revenue in the first year, and growing from then.
- Led 3 engineers under Agile framework; together created a product now hosting 2000+ users and offering 60+ courses and workshops.
- Developed a complex registration service with features such as team registration, and installment payment plans, which attracted 400+ users in the initial days.
- Implemented a custom secure web-based media player using JS, to prevent paid course record leakages, resulting in a 50% reduction in such incidents.
- Led the development of XUA, a PHP ORM facilitating business complexities such as foreign keys and many-to-many relations, accelerated development by approximately 20%.



### SOFTWARE ENGINEER @ DIGIKALA

2020 - 2021

The biggest E-commerce in Mena Region with 41+ million active users, alternative for Amazon in Iran.



- Implemented a queue management system for sellers, boosting satisfaction by an approximately 20%, faced challenges, such as the following.
  - Integrated the back-end API with third-party ticket-dispensing kiosks, collaborating closely with an external team.
  - Designed a complex state machine with 50+ states to ensure fair prioritization without compromising user satisfaction.
- Designed a warehouse aisle security tracking system with storage constraints (price, category, size), resulting in monthly savings of \$100K.



### SOFTWARE ENGINEER @ ARITHLAND

2017 - 2021

An Educational Center promoting mathematics using creative methods.

- Implemented 4+ applications, turned the old-fashioned competitions into high-tech ones.

# VOLUNTEER EXPERIENCE

**Chief Scientific Officer (CSO)** 2019 – 2020

**Head of Software Squad** 2018 – 2019

*Scientific Association of Computer Science, University of Tehran*

- Managed 10+ workshops and courses, such as the first Flutter course in Iran with 60+ students.

**Teaching Assistant**

*Department of Mathematics, CS, and Statistics, University of Tehran*

- Number Theory**
  - by [Amir Ghadermarzi](#)
- Foundations of Mathematics**
  - by [Mojtaba Mojtahedi](#)
- Logic**
  - by [Mojtaba Mojtahedi](#)
- Linear Algebra**
  - by [Siamak Yassemi](#)

# PUBLICATIONS

**DIVISOR TOPOLOGIES AND THEIR ENUMERATION**

Journal of Algebraic Systems · 2022

*F. Esmaeeli, K. Mirzavaziri, M. Mirzavaziri*

**DOUBLE DERANGEMENT PERMUTATIONS**

Open Journal of Discrete Mathematics (OJDM) · 2016

*P. Daneshmand, K. Mirzavaziri, M. Mirzavaziri*

**A CHARACTERIZATION FOR 2-SELF-CENTERED GRAPHS**

Seminarium Matematyka Dyskretna · 2015

*K. Mirzavaziri, M. Mirzavaziri, M. H. Shekarraz*

**k-COMBINATIONS OF AN UNLABELLED GRAPH**

Creative Mathematics and Informatics · 2015

*M. R. Ebrahimi Vishki, Kamyar Mirzavaziri, Madjid Mirzavaziri*

# UNDERSTANDINGS

- Data Structures & Algorithms**
- Formal Languages & Compilers**
- Functional Programming ( $\lambda$ -Calculus)**
- Object-Oriented Programming**
- Model-View-Controller Pattern**
- Object-Relational Mapping Technique**
- Git**
- Network Sockets, TCP, UDP**
- HTTP**
- REST APIs**
- Protobuf**
- gRPC**

# SKILLS

## DEVOPS

Linux (Ubuntu) (6Y) Docker (2Y) Kubernetes (1Y) GitHub Actions (1Y)  
Gitlab CI (1Y) Nginx (2Y) Ansible (1Y)

## DATABASES & QUEUES

MySQL (9Y) Redis (3Y) PostgreSQL (1Y) MongoDB (1Y) RabbitMQ (1Y)  
Kafka (1Y)

## LANGUAGES & FRAMEWORKS

Python (6Y) Django (1Y) Go (1Y) PHP (9Y) Symfony (1Y)  
JavaScript (9Y) Coq (1Y)

## WEB

HTML (9Y) Jinja (1Y) Twig (2Y) CSS (9Y) Sass (1Y) UIKit (1Y)  
Bootstrap (9Y)

## OTHER TOOLS

Prometheus (1Y) Grafana (1Y)

## MINOR ENCOUNTERS

WordPress (2Y) UI/UX Design (Figma) (1Y) Latex (8Y) Flutter (<1Y)  
Dart (<1Y) Meta Spark (<1Y)

# CERTIFICATES

**Go (Intermediate) Certificate**

*HackerRank · 2023*

[Show credential](#)

**SQL (Advanced) Certificate**

*HackerRank · 2023*

[Show credential](#)

**Rest API (Intermediate) Certificate**

*HackerRank · 2023*

[Show credential](#)

# READS

- Clean Code: A Handbook of Agile Software Craftsmanship**  
*Robert C. Martin*
- Logical Foundations**  
*Benjamin C. Pierce, et al.*
- Refactoring: Improving the Design of Existing Code**  
*Martin Fowler, et al.*