KAMYAR MIRZAVAZIRI
Software Engineer

Favorite Tools

ABOUT ME

- 2+ years experience in enterprise companies, 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

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- LinkedIn
- Stack Overflow
- Instagram
- Telegram
- GitHub
- GitLab
- Download Résumé

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

MID-LEVEL SOFTWARE ENGINEER @ DIVAR   2022 - Present
The biggest Iranian classified ads platform, alternative for eBay in Iran.

`K8s` `Docker` `Gitlab CI` `Go` `Python` `Redis` `PostgreSQL` `MongoDB` `RabbitMQ`

- 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, freeing up 24 CPU cores and 120 GiB of memory, resulting in a remarkable 66% reduction in consumed resources.
- Managed 5+ disaster, once recovered 85% of lost data, by writing a script to aggregate the data from action logs and restore data back to DB.

MID-LEVEL SOFTWARE ENGINEER @ AVISTOPIA   2021 - 2022
Learn-Compete-Work platform (startup).

`Docker` `Nginx` `GitHub Actions` `PHP` `JS` `MySQL` `Redis` `Twig` `Sass`

- 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 over 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%.

JUNIOR SOFTWARE ENGINEER @ DIGIKALA   2020 - 2021
The biggest E-commerce in Mena Region, alternative for Amazon in Iran.

`PHP` `Symfony` `JS` `MySQL` `Redis` `Twig`

- 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.

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

Technical Manager   2015 – 2021
Arithland Educational Center

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

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. Shekarriz

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 (λ-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)

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)

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

BOOKS

Read

- **Clean Code: A Handbook of Agile Software Craftsmanship**
  Robert C. Martin
- **Logical Foundations**
  Benjamin C. Pierce, et al.

Reading

- **The Go Programming Language**
  Alan A.A. Donovan, Brian W. Kernighan
- **Refactoring: Improving the Design of Existing Code**
  Martin Fowler, et al.
- **Site Reliability Engineering: How Google Runs Production Systems**
  Betsy Beyer, et al.

CERTIFICATES

Go (Intermediate) Certificate
HackerRank · 2023
Show credential

SQL (Advanced) Certificate
HackerRank · 2023
Show credential

Rest API (Intermediate) Certificate
HackerRank · 2023
Show credential