

# VAHID VAKILI-ZARE

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I'm a senior full-stack engineer with +9 years of gorgeous experience in back-end engineering I have professional experience in making web apps from small to large-scale projects.

I always enjoy developing and am an expert in Python and TypeScript. enthusiastically explore new technologies for my efficiency, always looking for new ways to solve problems as efficiently as possible. I have worked at several companies gaining teamwork and leadership skills. I continue to be inspired to excel as a developer and am eager to join a team with similar goals.

## EXPERIENCE

### TECHNICAL CONSULTANT, RAHKARSANAT | راهکار صنعت

DECEMBER 2022 – PRESENT (PART-TIME, REMOTE)

I still learn with a creative and kind team in the field of IOT and Fleet Management...

### FULL STACK ENGINEER, ARIACO | آریاکو

APRIL 2020 – MARCH 2023 (FULL TIME, ON-SITE)

Working in the field of financial technologies as a web full-stack engineer and software designer was an opportunity given to me by AriaCo company. During this time, I gained a lot of experience in the implementation of financial platforms as well as the execution of financial transactions and contradictions in the context of NoSQL technologies.

The big challenge I had in designing this platform was the number of client applications that should have the ability to accept each other while having an isolated environment in a common database, and also the architecture should be such that each client can express their own ideas.

### VOLUNTARY WORK

FEBRUARY 2022 – MARCH 2022

I was developed a portal to track and manage devices received by the maintenance department of the law enforcement command of Kerman province.

### BACK-END ENGINEER, AYANDEH-PAJOOHAN | آینده پژوهان

NOVEMBER 2020 – JANUARY 2022 (FULL TIME, HYBRID)

As of my best experience as a back-end engineer in cooperation with a software company is Ayandeh Pajooohan Company in health technology, which had a very open vision in the field of open-source development and provided solutions with scientific support that encourage me to develop a BPMN engine.

30TEB is a home care service application developed using PWA by VueJS and NestJS with NoSQL technologies, also provides service to the patient and attendant at their own location within the

city using OverpassAPI and also provides the possibility of audio and video chat using WebSocket and WebRTC for communication between patients and doctors.

Among the challenges faced in this project was the use of Push Notification on the web platform in browsers specific for each user, which we achieved this difficulty by using the IndexedDB.

### **FULL-STACK DEVELOPER, YEKTA-ERTEBAT | یکتا ارتباط تعاملی پرتونما**

**AUGUST 2019 – OCTOBER 2020 (FULL-TIME, ON-SITE)**

Working with Yekta Ertebat was one of my most exciting collaborations with a growing and developing company. In this company, I had a great experience in team collaboration as a full-stack engineer.

Among the tasks that I was engaged in at Yekta Ertebat Company was the design and development of a store builder and an integrated customer club. In addition, for some time I was engaged with scraping data using tools such as Appium and Selenium.

In the Kasbify project, using artificial intelligence as a customer behavior predictor to buy from a store or order from it was a challenge that we overcame by using a customized Q-learning reinforcement learning algorithm.

### **FOUNDER & CEO, HOUSHVAR-E-ARIA | هوش مصنوعی هوشور آریا**

**JULY 2018 – SEPTEMBER 2019 (SELF-EMPLOYED, HYBRID)**

One of the most valuable experiences I've had is trying to build a new company and plan for growth and success with a small team, I found my talent and passion during this golden age.

### **PROFESSIONAL DEVELOPMENT**

**SEPTEMBER 2015 – AUGUST 2018**

During this period, when I was a master's student in Computer Science in the field of Intelligent Systems, in this course I developed my professional experience with Python and used it in Machine Learning and Artificial Intelligence.

My focus at this time was on Metaheuristic Optimization and Deep Representation Learning with small data and some algorithms like SVM and KNN.

### **SPECIALIST RECRUITMENT REFEREE, FANAVARD | فناورد**

**OCTOBER 2017 (CONTRACT, ON-SITE)**

Kerman, Kerman Province, Iran.

### **FULL-STACK DEVELOPER, TAVAN-MOJ-E-KARMANIA | توان موج کارمانیا**

**SEPTEMBER 2013 – AUGUST 2015 (CONTRACT, HYBRID)**

During the period of cooperation with Tavan Moj Karmania company, I worked as a software designer and full-stack developer using PHP language and Laravel framework along with MySQL database and dashboard designed with Bootstrap and AngularJS.

Among the challenges, I was dealing with at this time was the real-time display of information resulting from location data acquisition using RFID, to overcome this problem a set of required statistics is stored in the database for each data acquisition request, such as counting and totaling in discrete time blocks to show in the dashboard.

# PROJECT

## WORKFLOW ENGINE

**Feb 2023 – Present (OPEN SOURCE PUBLISHED)**

WorkflowJS is a lightweight and flexible library for building workflows and processes with NodeJS. It allows you to define processes using BPMN 2.0.

Link: <https://www.npmjs.com/package/@vhidvz/wfjs>

## KIZ | کیز

**Dec 2022 – Present**

Kiz is a microservice architecture platform with multiple communication protocols, Kiz provides a comprehensive set of tools and services that can be used to build, deploy, and manage complex applications quickly.

Kiz is built on a powerful technology stack that includes MongoDB, a flexible and scalable NoSQL database for storing unstructured or semi-structured data for data storage, Redis for caching, and Node.js for server-side application development.

The Kiz platform is highly scalable and can handle Big Data and IOT traffic volumes. Therefore, developers and businesses can quickly scale their IoT applications as they grow and expand. Kiz provides services to its customers in both (PaaS) and (SaaS).

Link: <https://rahkarsanat.ir>

## NAMING CONVENTIONS

**Nov 2022 – Present (OPEN SOURCE PUBLISHED)**

Simple and Fast naming conventions modeler implemented by Proxy, zero dependencies.

Link: <https://www.npmjs.com/package/naming-conventions-modeler>

## ABACL

**May 2022 – Present (OPEN SOURCE PUBLISHED)**

The Attribute-Based Access-Control Library let you define five can access ability:

- Who can? the answer is role - Like RBAC a user can have roles.
- How can it? the answer is action - You can define any actions you want (scoped).
- What can? the answer is object - You can define all objects you want (scoped).
- Where can? the answer is location - With IP and CIDR you can find the location of users.
- When can it? the answer is time - Object availabilities with CRON expression and a duration.

Link: <https://www.npmjs.com/package/abaci>

## WIDE | واید

**Apr 2022 - Mar 2023**

Contactless mobile payment (wireless)

The wide platform has made it possible to remove the bank card and card reader. This application is installed on Android and iPhone smartphones and tablets and provides the ability to pay and receive money easily for the seller, customer, and everyone.

Link: <https://wide-app.ir>

## FAVA MAINTENANCE PORTAL | پورتال تعمیر و نگهداری فاوا

**Feb 2022 - Mar 2022**

This is a self-hosted portal to modernize the maintenance process of the VP of FAVA, Kerman, Kerman province, Iran.

### 30TEB | سیطب

Nov 2020 - Jan 2022

Tolo Behbodhi Assistive System is a practical platform for provision, provision, and access to health care services at home, which is abbreviated as 30TEB.

Link: <https://30teb.app>

### KASBIFY | کسبیفای

Aug 2019 - Oct 2020

We have provided a system that will meet your needs in any industry, of any size and market. With us, you will have a complete understanding of online and offline sales processes, warehousing, distribution, product supply, customer orientation, or any other related issue. Because the ultimate goal of us and you is to increase the amount of sales and improve the customer return rate.

The main tool in this way is to collect accurate and detailed data from buyers in every sales platform. These aggregated data are used to ensure that customer-oriented strategies are designed and implemented with greater accuracy and by accurately measuring real-time statistics, it leads to the creation of the best customer-specific shopping experience.

Link: <https://kasbify.com>

### SAMAN RFID | سمن

Sep 2013 - Aug 2015

This is a self-hosted solution for the Midok copper mine located 42 km northeast of Babak city, Kerman province, providing inbound tracking with RFID on trucks and online reporting to engineers there to help predict mine output.

## RESEARCH

Parallel computing and massive data processing with real-time streaming approach and its application in natural language processing, Vali-e-Asr University Of Rafsanjan (August 2016).

Local fleet management system, Vali-e-Asr University Of Rafsanjan (September 2016).

Investigation of neurons simulators and comparison criteria, Vali-e-Asr University Of Rafsanjan (September 2015).

## PUBLICATION

V. Vakili, H. Rezaei, K. Rezaei, K-Nearest Neighbors Using Small Data and Deep Neural Networks, 3<sup>rd</sup> International Conference on Soft Computing, Guilan, Iran (2019).

## EDUCATION

### MASTER, COMPUTER SCIENCE

*September 2016 - September 2018*

#### UNIVERSITY OF SISTAN AND BALUCHESTAN

Thesis: K-Nearest Neighbors and Support Vector Machine Classification using Deep Neural Network Representation.

### BACHELOR, INFORMATION TECHNOLOGY

*September 2012 - September 2015*

#### VALI-E-ASR UNIVERSITY OF RAFSANJAN

Talented Undergraduate Student in the field of information technology engineering at the Vali-e-Asr University of Rafsanjan.

## TEACHING

### ASSISTANT

*September 2016 – February 2017*

Faculty of Information Technology, University of Sistan and Baluchestan, Zahedan, Iran

### ASSISTANT

*September 2013 – september 2015*

Faculty of Computer Engineering, Vali-e-Asr University Of Rafsanjan, Kerman, Iran

## CERTIFICATION & WORKSHOP

### NETWORK+ CERTIFICATE

April 8, 2014

### WORKSHOP ON MODERN TRANSLATION METHODS

Rafsanjan, Iran (March 6, 2013)

## LANGUAGE

- **English:** Professional working proficiency
- **Persian:** Native or bilingual proficiency

## SKILLS

TypeScript, Python, Rust, MongoDB, Redis, MQTT, Kafka, EMQX, RabbitMQ, K6, gRPC, PHP, Tensorflow, GraphQL, RESTful, TDD/BDD, PWA, Jest, Scikit-Learn, Keras, HTML/CSS, C/C++, WebRTC, Shell Scripting, Laravel, ExpressJs, MySQL, NestJS, Vue, ElectronJS, VSCode, Bootstrap, Tailwind, JQuery, CI/CD, SSR/CSR, SocketIO, Docker, Kubernetes, GitFlow, SOLID, DRY/WET, Clean Code, Crawling, Selenium, Web Scraping, Appium, OpenAPI, Agile, SCRUM, Kanban, JWT, Linux