VAHID **VAKILI-ZARE**

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I am a senior full-stack engineer with +10 years of experience in software design and development, specializing in creating web apps for projects of all sizes. I am passionate about Python and TypeScript, and I am also exploring the Rust programming language to further enhance my skill set. Constantly exploring new technologies to improve efficiency and seeking innovative solutions to complex problems are central to my approach. Throughout my career, I've gained valuable teamwork and leadership skills, and I'm eager to contribute to a team with similar ambitions and goals.

EXPERIENCE

TECHNICAL CONSULTANT, RAHKARSANAT | راهکار صنعت
DECEMBER 2022 – PRESENT (PART-TIME, REMOTE)

Working in the field of IoT and gaining insight into its challenges was a valuable opportunity provided by Rahkarsanat, a company specializing in fleet management, where I serve as a technical consultant. One of the biggest challenges in this field is managing the vast amounts of data generated by numerous devices, which are continuously sent to servers and require significant processing and real-time handling.

FOUNDER, WENEX | وینکس
JUNE 2022 – PRESENT (SELF-EMPLOYED)

Wenex is a robust, well-structured, open-source platform built on a microservice architecture. It integrates cutting-edge technologies to help your enterprise and team achieve maximum speed and efficiency. Wenex is free to use under the Apache 2.0 license and supports a diverse range of needs, including Communication, E-Learning, Online Shopping, Banking, IoT, Cryptocurrency, and more.

SENIOR SOFTWARE ENGINEER, FINNOTECH | فینوتک
APRIL 2024 – SEPTEMBER 2024 (FULL TIME, ON-SITE)

Finnotech provided me with a completely different experience, one that was not entirely technical. During my time there, I worked to introduce new structures and address long-standing issues within the company. However, after numerous attempts, I changed my mind and decided to embrace the non-technical experiences I gained during my tenure.

SENIOR SOFTWARE ENGINEER, PORTAL SOFT LTD
JULY 2023 – MARCH 2024 (FULL TIME, REMOTE)

Working at Portal Soft was a unique and valuable experience where I gained in-depth knowledge of cryptocurrencies and Centralized Exchanges (CEX). During this time, I developed extensive expertise in implementing a Matching Engine, the core component of a Centralized Exchange.

SENIOR SOFTWARE ENGINEER, ARIACO | آریاکو

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

At AriaCo, I worked as a full-stack engineer and software designer in financial technologies, gaining experience in implementing financial platforms and managing transactions with NoSQL technologies. The main challenge was designing a system where multiple client applications could coexist in a shared database while maintaining isolated environments and allowing each client to express their unique requirements.

VOLUNTARY WORK

FEBRUARY 2022 – MARCH 2022

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

LEAD SOFTWARE ENGINEER, AYANDEH-PAJOOHAN | آینده پژوهان

JULY 2020 – DECEMBER 2021 (CONTRACT, HYBRID)

At Ayandeh Pajoohan Company, I worked as a back-end engineer on health technology projects with a focus on open-source solutions. I developed a BPMN engine and contributed to 30TEB, a home care service app built with VueJS, NestJS, and NoSQL. The app enables location-based services, audio/video communication between patients and doctors, and secure data exchange via Push Notifications.

SENIOR SOFTWARE ENGINEER, YEKTA-ERTEBAT | یکتا ارتباط تعاملی پرتونما

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

At Yekta Ertebat, I worked as a full-stack engineer, collaborating on exciting projects such as designing a store builder and integrated customer club. I also gained experience in data scraping with Appium and Selenium. In the Kasbify project, we successfully tackled the challenge of predicting customer behavior using a customized Q-learning reinforcement learning algorithm.

PROFESSIONAL DEVELOPMENT

DECEMBER 2016 – AUGUST 2019

While pursuing my master's in Computer Science with a focus on Intelligent Systems, I enhanced my Python skills in Machine Learning and Artificial Intelligence, concentrating on Metaheuristic Optimization, Deep Representation Learning with small data (Few-Shot Learning), and algorithms like SVM and KNN.

SPECIALIST RECRUITMENT REFEREE, FANAVARD | فناورد

OCTOBER 2017 (CONTRACT)

This exam, conducted annually by a semi-government company, aims to identify, assess, and introduce experts for employment in private sector companies.

SOFTWARE ENGINEER, TAVAN-MOJ-E-KARMANIA | توان موج کارمانیا

SEPTEMBER 2013 – SEPTEMBER 2016 (CONTRACT)

During my time at Tavan Moj Karmania, I worked as a software designer and full-stack developer using PHP, Laravel, MySQL, Bootstrap, and AngularJS. One major challenge was displaying real-time location data via RFID. To solve this, I implemented a system that stored required statistics, such as counts and totals, in discrete time blocks, which were then displayed on the dashboard.

PROJECT

LANDAU

Jul 2024 – Present

Landau is a Wenex client specifically developed for buying and selling automotive spare parts. This application serves as an intermediary between auto repair technicians, spare parts sellers, and distributors involved in the supply chain. It streamlines the process of connecting these stakeholders, enhancing the efficiency of spare parts transactions and logistics.

Hyperlink: https://github.com/landau-ir

CRYPTO-AIO

May 2024 – Present (OPEN SOURCE PUBLISHED**)**

Crypto-AIO is an all-in-one cryptocurrency solution designed specifically for backend development. It provides a comprehensive set of tools and functionalities to integrate and manage cryptocurrency operations seamlessly within backend systems.

Hyperlink: https://github.com/vhidvz/crypto-aio

WORKFLOWJS

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

WorkflowJS is a lightweight and flexible JavaScript library for building and executing workflows with Node.js. It enables the definition of processes using BPMN 2.0 standards, offering a simple, declarative syntax for process design. The library provides a versatile framework for managing workflow events and activities, making it easy to create and manage complex workflows.

Hyperlink: https://www.npmjs.com/package/@vhidvz/wfjs

KIZ | کیز

Dec 2022 – Present

Kiz is a Wenex-inspired versatile microservice architecture platform that supports multiple communication protocols and provides a comprehensive suite of tools for building, deploying, and managing complex applications. It features a robust technology stack, including MongoDB for scalable data storage, Redis for efficient caching, and Node.js for server-side development. Designed for high scalability, Kiz effectively handles big data and IoT traffic, allowing seamless application scaling. It supports both Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS) models to meet diverse customer needs.

Hyperlink: https://rahkarsanat.ir

WENEX

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

Wenex is a powerful, open-source platform built on a robust microservice architecture, designed to maximize speed and efficiency for enterprises and teams. It integrates advanced technologies to support a wide range of applications, including communication, e-learning, online shopping, banking, IoT, cryptocurrency, and more. Wenex is free to use under the Apache 2.0 license, making it accessible and flexible for diverse business needs.

Hyperlink: https://github.com/wenex-org

ABACL

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

The Attribute-Based Access-Control (ABAC) Library allows you to define access permissions based on five key attributes:

1. Who can? – Defines roles, similar to RBAC, where a user can be assigned multiple roles.
2. How can? – Specifies actions, allowing you to define any scoped actions for users.

3. What can? – Identifies objects, enabling you to define scoped objects for access control.
4. Where can? – Uses IP addresses and CIDR to determine the location of users.
5. When can? – Sets time-based access rules using cron expressions and durations to control object availability.
This structure provides flexible, granular control over access permissions. Hyperlink: https://www.npmjs.com/package/abacl

WIDE | واید

Apr 2022 - Mar 2023
This contactless mobile payment platform eliminates the need for bank cards and card readers. Available on Android and iPhone smartphones and tablets, it enables seamless payment and money transfer, offering convenience for sellers, customers, and all users.
Hyperlink: https://wide-app.ir

FAVA MAINTENANCE PORTAL | پورتال تعمیر و نگهداری فاوا

Feb 2022 - Mar 2022
This self-hosted portal is designed to modernize the maintenance process for the VP of FAVA in Kerman, Kerman province, Iran.

30TEB | سیطب

Jul 2020 - Dec 2021
30TEB is a practical platform designed to provide and facilitate access to home healthcare services and medical consultations through secure, real-time communication via WebRTC.
Hyperlink: https://30teb.app

KASBIFY | کسبیفای

Aug 2019 - Oct 2020
Our system caters to businesses of all sizes and industries, offering comprehensive insights into sales processes, warehousing, distribution, and customer engagement. Collecting accurate buyer data across all platforms and analyzing real-time statistics, we help you implement precise, customer-centric strategies that drive increased sales and improve customer retention, ensuring an exceptional, personalized shopping experience.
Hyperlink: https://kasbify.com

SAMAN RFID | سمن

Sep 2013 - Sep 2016
This self-hosted solution supports the Midok copper mine, situated 42 km northeast of Babak city in Kerman province. It offers RFID-based inbound truck tracking and provides real-time online reporting to engineers, enabling more accurate predictions of 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.

Local fleet management system, Vali-e-Asr University of Rafsanjan.

Investigation of neurons simulators and comparison criteria, Vali-e-Asr University of Rafsanjan.

PUBLICATION

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

EDUCATION

MASTER, COMPUTER SCIENCE

September 2016 - September 2019
SHAHID BAHONAR UNIVERSITY OF KERMAN
Thesis: K-Nearest Neighbors and Support Vector Machine Classification using Deep Neural Network Representation.

BACHELOR, INFORMATION TECHNOLOGY

September 2012 – June 2016
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 2017 – January 2018
Faculty of Information Technology, Shahid Bahonar University of Kerman, Iran

ASSISTANT

September 2013 – June 2016
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,, GraphQL, RESTful, DDD, PWA, Jest, Scikit-Learn, Keras, HTML/CSS, WebRTC, MongoDB, Redis, NestJS, Vue, VSCode, Bootstrap, Tailwind, SSR/CSR, Docker, GitFlow, SOLID, DRY/WET, Clean Code, Crawling, Web Scraping, OpenAPI, Agile, SCRUM, Kanban