Babak K. Shandiz Software Engineer (1988-)

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Summary

I started programming at an early age. This provided me with the opportunity to experience some influential platforms/technologies, like Commodore 64 or Sinclair Spec*trum* and rather modern ones like *VB6* or *Turbo* C++. I've been using C# and .NET since their early days, and soon found myself being passionate about Object-Oriented Programming and began exploring books and articles (mostly on The Code Project then) on design patterns, application architecture, clean coding and experimenting ideas and self-thoughts.

In the late 2000's, relational databases attracted my attention more than before. Since then, I occasionally read on database design and other concepts on the topic and try to make a point of following standards on my projects. I also have hands on experience on leveraging *NoSQL* or *key/value pair* databases.

Out of workplace, I actively provide consult to governmental or personal software projects. In my spare time, I'm curious learner and a developer who is passionate about C#/TypeScript and occasionally contributes to open-source projects. My last but not least interest is creating technical content based on day-to-day experiences, which I currently follow through sharing on my personal weblog at Github and DEV.

Currently, I'm a senior software engineer at Cafebazaar, the largest Iranian Android app store¹ and one of the top third-party app markets world-wide², developing high-load web services in *Go* and *Python*.

Experience

RayanShop Mashhad, IRAN

RayanShop was a pioneer online-shopping startup in Iran, long before current well-known rivals like Digikala.

Full-Stack Developer 2002 - 2004

Developing back-end (*Classic ASP*) and front-end (vanilla *JavaScript*).

Ferdowsi University of Mashhad (FUM)

Mashhad, IRAN

Architect & Full-Stack Developer

March '11 – Sep '11

Designing and implementing the National Bilateral Energy Market web application using ASP .NET and SQL Server, as B.Sc. graduation project.

Mashhad Urban Railway Operation company (MUROC)

Mashhad, IRAN

Architect & Developer

Mar '15 – Mar '17

The project was to implement an integrated electro-mechanical simulation system to be used in further energy optimization studies. The platform was successfully realized, currently known as SITRAX.

Khorasan Regional Electric Company (KREC)

Mashhad, IRAN

KREC is a governmental company that manages and maintaines regional power transmission grid.

Nov '14 - Sep '15 Researcher

Research on *REF* protection schemes in transmission gird.

Researcher & Full-Stack Developer (Military Service for Elites)

June '15 - Aug '17

The research topic was to find the optimal solution for power transformer overloading dilemma. The implementation phase, was to develop a software platform that delivers research results as automated routines and user-friendly interfaces.

IT Consultant June '19 – Dec '19

The project is an enterprise solution that covers several aspects of *Preventive Maintenance (PM)* routine, done on high-voltage substations, to remove paperworks and ultimately automate the current workflow. The project consists of mobile user interfaces, core function as back-end and relational databases.

Part Software Group Mashhad, IRAN

Part is a Fintech company, developing financial solutions in stock market related and banking fields. The company also aims to provide basic infrastructure services as a rich service cloud.

Back-End Developer

Sep '18 - Dec '18

Senior back-end developer at *Public Services* team, with *nodejs* as platform. The services include (but not limited to): authentication/authorization, access control, user profile, messaging, and file storage.

Lead Back-End Developer

Dec '18 - Aug '19

At the *Public Services* development team.

¹Cafebazaar on Wikipedia

²Third-party Android app markets on Wikipedia

Lead Back-End Developer

Aug '19 - Oct '19

At .NET development team, developing *Legal Tech* business web services.

Mashhad, IRAN

Cafebazaar is the first and largest Iranian Android app market¹ with 50M users³, and one of the top third-party Android app markets world-wide.²

Senior Back-End Developer

Jan '20 – present

At the *App-Delivery* team, the mission is to provide users with the latest versions of applications while keeping device compatibility as a constraint. High-load services, written in Go and Python, serve users with up to 2K requests per second.

Coding Interviewer

July '20 - Dec '21

As a member of the Software Enigineering Interview team, I participate in review/interview process aimed at evaluation of applicants' coding skills. This involves evaluating various aspects from basics to more advanced topics including OOP design, Clean Code/Architecture, and SOLID principles.

OSS Contributions

Microsoft VS Code (microsoft/vscode)

Contributed

Versions 1.36.0 and 1.50.0.

Others

VS Code Github issue notebooks, Oh My Zsh, Docker library docs, Helm charts, etc.

Education

Ferdowsi University of Mashhad (FUM)

Mashhad, IRAN

M.Sc. in Electric Power Engineering

2011 - 2014

Focused on high voltage power transformer protection schemes.

FUM

Mashhad, IRAN

B.Sc. in Electric Power Engineering

2007 - 2011

Implemented National Bilateral Energy Market web application using ASP .NET and SQL Server, as graduation project.

Malek-e-Ashtar College-preparatory School

Mashhad, IRAN

College-preparatory Diploma in Mathematics & Physics Science

2006 - 2007

Honors & Awards

Ranked 1st among fellow students (B.Sc., GPA: 18.98/20.) Ranked 1st among fellow students (M.Sc., GPA: 19.17/20.) 2011 2014

Served military service as academic elite.

2015-2017

Skills

Software design, concepts & protocols

Object oriented programming, design patterns, SOLID principles, loose/tight coupling concerns, dependency injection, inversion of control, unit/integration tests, databases, web services, SOA, REST, microservices.

Software implementation & tools

Languages C#, TS/JS, Python, Go; Familiar with C/C++ and Java

Unit testing frameworks/tools NUnit, MSTest, Moq, mocha, jest, chai, sinon

Front-end technologies/tools HTML, CSS, jQuery, Aurelia, Vue.js

Back-end technologies/tools nodejs, ASP .NET MVC/Web API, ASP .NET Core, express.js, django

Communication methods and tools gRPC, Protobuf, REST

Databases SQL Server, Postgres, MongoDB, Redis

Big Data Solutions Spark, PySpark, Hadoop

RabbitMQ, Kafka Messaging technologies

Metering and monitoring Prometheus, Grafana

³As of December 2021

Source control and interfaces
Linux shells and tools
Orchestration/Containerization and tools
IDEs, editors and development tools
Miscellaneous

GIT, GitLab, GitHub bash, zsh, oh-my-zsh Kubernetes, docker, helm Visual Studio, VS Code, Postman ŁATEX, RegEx, MATLAB

Natural languages

Persian (native), English (full professional proficiency), Arabic (limited)

Interests

Non-exhaustive and in alphabetical order: Art, books, graphics, mathematics, music, open source projects, painting, problem solving, riddles, software engineering, studying, teaching, video games, writing.