# Aziz Ünsal

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### **PROFILE**

I'm a senior software engineer with over 15 years of experience in analyzing, designing, implementing, and testing enterprise-grade Java web applications.

#### **EXPERIENCE**

### Lead Software Engineer; Nevalabs, Istanbul & Remote

03/2015 - 03/2022

I joined the company just after it was founded.

- Created a small software team.
  - Participated in the recruitment process, especially for the technical interviews.
  - Decided to use Scrum framework as project management methodology.
  - Created a software development life cycle (SDLC) using tools; Git, GitHub, and Atlassing JIRA, and Confluence.
- Created the first product of the company Corvo Identify using Spring Boot, BackboneJS and MS SQL Server.
  - Migrated over 100.000 rows of suspects from the existing database.
    - Developed an image processing application with Rust language for data migration from the existing database.
  - The application deployed to the G20 Zone, Antalya airport, and the main bus terminal and used by the authorized personals during the G20 summit.
- After the event, the application was selected for the homeland security and I lead the team migrate the application (Corvo Identify) for a more robust architecture.
  - The application moved to *Microservices Architecture* by breaking down the monolith into smaller independent projects.
  - Used Redis for storing Spring managed sessions.
  - Used Spring Cloud and Netflix OSS projects for the building blocks of the microservices architecture.
    - Used Zuul for API Gateway and dynamic routing.
    - Used Eureka for service registry and discovery.
    - Used Feign as REST client.
  - Selected asynchronous, event-driven architecture for service-to-service communication.
    - Used RabbitMQ for messaging, as the broker.
  - Created CI/CD pipelines using Jenkins Blue Ocean as CI server, Ansible for provisioning, and Docker for creating containers after each build.
  - Added integration tests and motivated the team for a paradigm shift to eliminate most of the manual testing process.
- The new architecture deployed to the servers of General Directorate of Security.
- Another variant of the project, for recognizing faces from live streams, was created for another branch of the Turkish National Police.
- Created Docker / Docker Compose configurations for demo and test purposes.
- Designed and developed a cloud based face verification API, Corvo Verify, for various kind of customers.
  - Corvo Verify provides KYC, identity verification, and fraud prevention solution for companies.
  - Used Python and Flask web framework.
  - Deployed to the private cloud infrastructure K8s.
- Created a private cloud infrastructure with K8s on bare-metal servers.
  - In the absence of a network load balancer (like in GCK, AWS, Azure, etc), HAProxy was used as load balancer outside of the K8s cluster.
  - Created HA infrastructure for the projects via Nginx Ingress Controller.
- Designed and developed a user onboarding web application for online banking applications.

- Used *Python* and *Flask* web framework for the backend.
- Created a demonstration web application with ReactJS.
  - Used WebRTC for using client video streaming.
- Led the development of the new project, Corvo Access.
  - Created project structure for front-end with ReactJS
- Made demonstrations and presentations with *Corvo Identify* for international customers.
  - An on-site installation made in *Morocco*, for Morocco's national police force (DGSN).
  - Remote installation and demonstration for *Ukrainian* airport and shopping mall security.
  - Made demonstrations and presentations for national customers.
- I also worked as software development manager without sacrificing the technical lead role.

#### Senior Software Developer; Agito Softare & Consulting, Istanbul

05/2014 - 03/2015

Developed Agito Private Pension and Life Insurance Information System for <u>AvivaSA</u>, a subsidiary of <u>Aviva</u>. The project was already late when I participated in. My main goal was here to help the team to develop features, and on the other hand, creating a good and reliable software development life cycle to prevent recurring bugs.

- Created a code-review process using Atlassian's FishEye and Crucible products.
- Mentored junior Java developers to improve the overall code quality of the project and make them engaged in the project.
- Ported the project to a different <u>customer</u> which is one of the big insurance companies in Turkey.

#### Senior Software Developer; Kartaca, Istanbul

01/2012 - 02/2014

The company consists of cohesive teams and highly skilled software engineers and system administrators. All teams apply the SDLC phases in their daily development process.

Preparing technical analysis, developing software, reviewing code for Turkcell projects with the team of Last User Services.

- Developed frontend and backend for *Turkcell Muzik (later called <u>Fizy</u>), Turkcell RBT Adapter* and <u>Calarken Dinlet</u> projects using *Java, Spring, Hibernate*, and *Freemarker template engine* for Turkey's leading communication service provider Turkcell.
- Used *Memcached* for performance critical API methods.
- Participated in analyzing the migration process from pure JavaScript to a SPA using one of the available frontend frameworks(BackboneJs, Angular, EmberJs) for Turkcell Muzik frontend project.
- Made optimizations for application data model on Oracle database and migrated about 60 million rows of user data using PL/SQL.
- Joined and completed an Agile Methodologies and Scrum course.

#### Sofware Developer; Gerger Consulting, Istanbul

05/2006 - 12/2011

- Project & Technical Manager of *Flagger(http://theflagger.com)*, similar to Foursquare, a social website to share memories using *MySQL*, *PHP*, and *JavaScript*.
  - Developed and designed frontend of the application (HTML&CSS, jQuery, Google Maps API, Ajax, JSON)
  - Developed backend database structure (MySQL, PHP, Apache Tomcat and Zend Framework)
- Developed IBEX, a web-based budget and finance management system for the *Republic of Ethiopia (MoFED Ministry of Finance of Ethiopia)* using Oracle Database, PL/SQL and Gerger's own product Formspider.
  - Analyzed the requirements for the accounting module.
  - Designed and developed the accounting module.
  - Developed monthly accounting reports.
  - Also, analyzed the old system which built on the Struts Framework and MS SQL Server.
- Developed a web-based business rule repository manager using *Oracle Database*, *PL/SQL* and Oracle Fussion Middleware (*Oracle Application Server, Oracle ADF, ADF Faces, JSF*).
- Developed web-based survey designer using Adobe Flex (ActionScript).
- Developed survey generator using *Oracle Database*, *JSP*, *PL/SQL* and *JavaScript (AJAX)*, that deploys web surveys with web 2.0 features for *Preeclampsia Foundation*.
- Added new features and functionality to Dulcian's BRIM tool (BRIM is a UML-based system development

environment) using JDeveloper, Java, Oracle Database.

## **SKILLS**

Java, JavaScript, Python, Rust, SQL, Spring Boot, Flask, BackboneJS, ReactJS, Oracle, PostgreSQL, MySQL, NoSQL, Hibernate, CI/CD, DevOps, Docker, Kubernetes.

## **EDUCATION**

B.S. in Computer Engineering, Canakkale Onsekiz Mart University, 2004.

## PERSONAL INFORMATION

Birth Date: 20.08.1981Military Status: Done (2005)