Location: Shiraz, Iran Nationality: Iranian M: +98 939 3505812

E: davoodbahadori@gmail.com Personal Website: dbahadori.github.io Marital status: Single Military Service: Completed

# **David Bahadori**

# **Technical CV**

### PROFESSIONAL PROFILE

As a multi-skilled technical person with several years of background knowledge in SOA, I have done several projects in related to designing and developing software application under different platforms, technologies, and frameworks such as ASP.Net MVC, play REST API, SOAP Web Service, FreeSWITCH, Elastix, and etc. In my roles I have built up both my knowledge and experience of software development and architecture.

#### **KEY SKILLS AND COMPETENCIES**

- Deep knowledge of SOA concepts.
- Long time experience in developing SOAP, REST and message based services.
- Knowledge about EIP patterns and related mechanisms in WSO2 ESB.
- Knowledge of software architecture documentation (V&B framework).
- Good skill in research and technology benchmarking.
- Modeling with UML 2.0, Rational Rose & EA.
- Experience of Git and SVN version control systems.
- Experience of Play and ASP MVC web development frameworks.
- Experience of WSO2 IoT Middleware
- Experience of Raspberry Pi and Node-RED
- Experience of web scrapping and automation using Selenium framework
- Experience of some VOIP server and transactional IVR.
- Good presentation skill.
- Knowledge of document plagiarism detection.
- Knowledge of I4.0 Maturity Model Development
- Knowledge of Machine Learning, particularly Deep Reinforcement Learning

#### PROFESSIONAL EXPERIENCE

Best Group Company, Canada, 2021

### **Key achievements**

• Implemented a web automation application for Multi-Step booking System using **Selenium framework** and **Python** language.

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# Research & Development- IRISA (contractor of Mobarakeh Steel Co.), Isfahan, August 2018 – 2019 Key achievements

- A general survey about available Industry 4.0 and Digital Transformation maturity models
- A benchmark comparison between available Industry 4.0 maturity models
- A categorization of Industry 4.0 Dimensions
- Initialize and configure WSO2 IoT Server

### **Key responsibilities**

- Developing a Maturity Model and Road Map for Digital Transformation (Smartization) of Mobarake Steel Company (MSC)
- Implementing industry 4.0 principles in one area of MSC company as a pilot
- Developing an IoT architectural framework in order to implement an **IoT middleware** for realizing the industry 4.0 technological principles in pilot area

# **REST API and Client Application Developer – Rayan Ham-Afza Company,** Tehran, May 2017 – March 2018 **Key achievements**

- Implemented an e-payment service integrated with more than 10 banks with different security policies and mechanisms using **dependency injection** and **factory patterns** (Java and play framework).
- Implemented API configuration services in order to removing repetitive configuration task in DB side (Java and play framework).
- Implemented customized controls as well as a theme manager in order to reduce programming effort by customizing Material Skin (C# .NET).
- Prevented **SQL injection** attacks by parameterizing queries, which are used in different layers of application and functions as well as stored procedures in Oracle DB (**Java** and **Struts framework**).

### **Key responsibilities**

- Customizing the Material Skin Controls for .Net WinForms in order to use in client side application.
- Migrating proprietary stock brokers and investment funds software from web based application (Struts framework) to service based application, REST API (play framework).

# Research & Development – ARKA Company (as Project), Tehran, September 2016 – December 2016 Key achievements

- Benchmarked the Open Source Web Development Frameworks for .NET and selected suitable technologies and frameworks as well as implemented some scenarios using the proposed frameworks (ServiceStack, NLog and FluentValidation).
- Initialized the Mono and deployed the operational WCF services on Apache Server, running on a CentOS.

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• Implemented a C# Client App for concurrent monitoring of running services by taking advantage of **Zabbix server**.

### **Key responsibilities**

• Provide a framework for development team that comprised of open source framework and meet technical requirements of project such as logging, exception handling, changeability and validation.

# Analyst and Designer – Tavana Resaneh Company (as Project), Tehran, September 2015 – November 2015 Key responsibilities

 Analysis and design a web based system that was comprised of server and client side applications for online burger shopping using UML 2.0.

# **Software Developer – Tavana Group,** Tehran, January 2014 – May 2015 **Key achievements**

- Implemented a web based system for automatic plagiarism detection using Lucene. Net and ASP.Net MCV.
- Implemented a workflow designer for proprietary USSD&SMS gateway using JavaScript and jointjs library.
- Implemented an IVR Application for registering users in logistic system using **Elastix** by taking advantage of Asterisk AGI.
- Initialized and configured FreeSWITCH VOIP Server and Implemented IVR application on it.
- Implemented performance and stress test of installed FreeSWITCH VOIP Server using **Sipp** software.

### **Key responsibilities**

- Developing SOAP based web services for proprietary USSD&SMS gateway using Axis2.
- Research, select and configure a scalable open source VOIP Server.

### TEACHING AND PRESENTATION EXPERIENCE

Mobarakeh Steel Company (MSC)

2019

Lecturing "Introduction of Industry 4.0 Dimensions and Maturity Models"

Hormozgan Steel Company (HOSCO)

2019

Lecturing "Introduction of Industry 4.0 Dimensions and Core Technologies"

• ICT Research Institute (IST 2018 Symposium)

2018

Oral presentation, "T-DSCM: A Three-Dimensional Framework for Service Change Management in SOA Environments", *ICT Research Institute* 

Telecommunication Company of Tehran

2014

Lecturing "Introduction to SOA based Integration and related Technologies: **ESB**, XML, XSD, SOAP and Web Service"

• Computer Engineering Scientific Association of Birjand University 2009
Lecturing "Professional ASP.Net 2.0: Web part, Membership and Security, etc."

David Bahadori DOB: 5th October 1986

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### **PUBLICATION**

• D. Bahadori and A. A. Barforoush, "T-DSCM: A Three-Dimensional Framework for Service Change Management in SOA Environments," in 2018 9th International Symposium on Telecommunications (IST), 2018, pp. 630–636.

#### RESEARCH INTEREST

- Self-Adaptive Software Systems with taking the advantages of SOA, RL, and MAS
- Service Oriented Architecture (SOA System Evolution, Self-\* SOA Systems, Service Versioning)
- Service Oriented Middleware (Service Discovery, Publishing, Composition, Orchestration and choreography, QoS, Adaptive Enterprise Service Bus)
- Event-driven SOA (Asynchronies Service Orchestration and Choreography)
- Large Scale Software Architecture (Architectural Design & Style, View based Documentation, Adaptation)
- Deep Reinforcement Learning
- Multi-Agent Systems

# **TECHNICAL SKILLS**

- Modeling Languages:
  - UML (moderate proficiency)
- Programing Languages:
  - Java (moderate proficiency)
  - C# (moderate proficiency)
  - o Python
- Dot Net Technologies
  - Microsoft ASP.Net, MVC, and WPF (moderate proficiency)
  - Lucene.Net (moderate proficiency)
  - Microsoft SQL Server Database (moderate proficiency)
- SOA-based Technologies
  - SOAP/RESTfull Web Service (strong understanding)
  - WSO2 ESB (strong understanding)
  - WSO2 Repository (moderate proficiency)
  - o Istio service mesh (familiar with it)
  - Kubernetes (familiar with it)
  - Microservice Design Pattherns
    - Saga

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- Personal Website: dbahadori.github.io
  - CQRS
  - Event sourcing
  - Circuit Breaker
- Spring Projects
  - Spring Boot (familiar with it)
  - Spring Security (familiar with it)
  - Spring Cloud Stream (familiar with it)
- Web Technologies
  - Selenium Framework (strong understanding)
  - Play Framework (moderate proficiency)
  - Java Script (moderate proficiency)
  - Zabbix Monitoring Server (familiar with it)
- Version Control Systems
  - Git (familiar with it)
  - SVN (familiar with it)
- Messaging Platform
  - RabbitMQ (familiar with it)
  - o WSO2 Event Broker (familiar with it)
  - Kafka (familiar with it)
- Other Skills
  - CentOs (familiar with it)
  - Elastix and Freeswitch Voip Server (moderate proficiency)
  - Drools Rule Engine (familiar with it)
  - Software Architecture Documentation (V&B framework, 4+1 framework)

### **PERSONAL SKILLS**

- Focused and Accuracy
- Quality oriented
- Intuitive and innovative
- Motivated
- Agile and Self-Learner

#### FORMAL EDUCATION

Amirkabir University of Technology (Tehran Polytechnic), Iran, September 2011 – January 2014 MSc, Information Technology Engineering.

Birjand University, Iran, September 2008 – September 2010

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BSc, Computer Engineering (Software).

Shahid Chamran University of Ahvaz (Jundi Shapur), Iran, January 2006 – January 2008

ASc, Computer Software.

### **FURTHER EDUCATION**

# **Machine Learning Course**

Stanford University, Coursera MOOC by Andrew Ng, 2020

### **Reinforcement Learning Specialization**

University of Alberta, Coursera MOOC by Alberta Machine Intelligence Institute, 2021

• Four course specialization covered Fundamentals of Reinforcement Learning, Sample-based Learning Methods, Prediction and Control with Function Approximation, and A Complete Reinforcement Learning System (Capstone) using python libraries.