IN SUMMARY

As a highly active and motivated professional enterprise software architect with more than of 10 years of experience in analysis, design, development and architecting large scale, national and international enterprise projects, my skills are not limited to a specific development platform and my solutions include a variety of technologies based on C/C++, Java, Python, etc. As an architect of national enterprise projects, I've always faced strict and risky conditions in which security, performance, data consistency, data correctness, distribution of resources, fault tolerance, high availability, authorization and authentication have always been important factors to them. As an example, I've architected Kawthar ePassport Issuance System for Iran's Ministry of Foreign Affairs and it is operating world wide in more than of 70 countries.

EMPLOYMENT EXPERIENCES

April 2015 - Present
Noavaran Tejarat Gostar Naeem Co.
Chief Technical Officer
Senior Enterprise Software Architect
Senior C/C++/Java SE Developer

- *Development environment*: Ubuntu Desktop, Ubuntu Server, Git, Jenkins, Redmine Issue Tracker, Test Driven Development, Free IDE, agile based methodology, *gcc, g++ and OpenJDK 7* compilers, C++11 for back-end services, Python 2 and 3, etc.

- *As a CTO*: Managing and coaching more than 15 software and hardware developers organized in 6 different teams, Strategic decision making for comapny's technical future, Cooperation with and coaching research teams operating in *Image Processing, Machine Learning, NLP, Security, Hardware, Cryptography, Mathematics* fields, Supervising all data structures and algorithms proposed by research team and coaching developers and architects through implementation phase, conducting sessions with academic people and using the top most national knowledge to supply the research teams

- *As a senior enterprise architect*: SOA, C/C++ based architecture, Java SE/EE based architecture, distributed architecture, SaaS, IaaS, PaaS, high performance message queues, micro-batching and stream processing, durable queues, supervising testers and designed test scenarios, etc

- *Technologies*: PKI, Design of CA infrastructure, ICAO CSCA and DS arhcitecture, NFC tags and chips, NFC readers and writers, ICAO Documents 9303, biometric algorithms and engines, architecting ABIS, distributed processing and data storage, architecting Network Analysis engine, Huge data structures, In memory data structures, Query languages, Apache Hadoop Family, Apache Cassandra, Redis, Apache ZooKeeper, Redis, MemCached, Bloom Filters, Apache Kafka, Apache Storm, Apache Spark, Apache Ignite, Relational PostgreSQL, Object Oriented PostgreSQL, PL/PgSQL, Hottentot RPC Framework, PKCS12, PKCS11 API, PKCS10, PKCS7, etc

- *Hardware*: Security tokens and cryptographic ICs, NFC reader and writer devcies, Embedded Programming, Raspberry Pi 2, Arduino Boards, ARM MCUs, etc

- *Projects*: Kawthar Geographically Distributed ePassport Issuance System, NETWE Network Analysis engine, distributed crawler engine, data analysis container, Consular Portal for Iran's Ministry of Foreign Affairs, ABIS Engine, Biometric Data Enrolment Applications, Query language for NETWE using Yax/Lex

February 2015 - June 2015
Sahab Pardaz Co.
Enterprise Software Architect
Distributed Systems Architect
Senior Java SE/EE Developer
C++ Developer

- *Development environment*: Ubuntu Desktop, Ubuntu Server, Git and Mercurial, Jenkins, Redmine Issue Tracker, Test Driven Development, Test Coverage Score, Free IDE, Scrum methodology, *gcc, g++ and OpenJDK 7* compilers, etc.

- *As a enterprise architect*: Focusing on scalable systems with high throughputs and balancing the load along many nodes, Participation in architecting sessions, Supervising C/C++ and Java developers, Designing tests and test scenarios, Maven-based versioning system for writing embedded stubs for facilitate test scenarios

- *Technologies*: Apache Hadoop Family, Bloom Filters, Apache ZooKeeper, Apache Cassandra, Redis, MemCached, Apache Kafka, Apache Storm, Apache Spark, Apache Ignite, RPC solutions like GRPC (Google RPC), ZeroIce, etc

March 2013 - June 2015
Mojtama E Fanni Tehran (Tehran Technical Complex)
Director of Programming Department
C++/Java SE/EE Instructor
Senior Java EE Developer/Architect

- *Development environment*: Ubuntu Server, Git, Free IDE, Agile based methodology, *gcc, g++ and OpenJDK 6* compilers, etc.

- *As a director of department*: Managing and supervising classes, Coaching instructors, Designing courses and their syllabus, etc

- *As an architect/developer*: Developing a service oriented educational system called EduSys, Developing automation and financial systems

- *Technologies*: Java based development, Web tier using Spring MVC and Spring Security frameworks, PostgreSQL database

December 2011 - June 2013
Sharif CERT Center
Java SE/EE Developer
C/C++ Developer/Architect

- *Development environment*: Ubuntu Desktop, Ubuntu Server, SVN, Git, Eclipse IDE, Agile based methodology, *gcc, g++ and OpenJDK 6* compilers, Test Driven Development, etc.

- *As an developer/architect*: Research and develop on Network Security concerns (L2 and L3), Working with algorithms and data structures which they are involved in security related topics, Malware analysis, Traffic analysis, Attack analysis

- *Technologies*: C/C++, Java 6, PostgreSQL, MySQL, JNetPcap, tcpdump, tcpreplay, etc

- 2012 May, Member of Technical Team, CTF Competitions, Iran's Second National Hacking Contest, Sharif University of Technology. Designer and Auditor for Java Secure Coding Question

- 2013 Feb, Member of Technical Team, CTF Competitions, Iran's Second National Hacking Contest, Sharif University of Technology. Designer and Auditor for C++ Secure Coding Question

October 2011 - June 2012
Sharif Engineering Process Development Co.
C++/Qt Developer

- *SEPDCo Gas Network Simulator System*: A gas network and pipeline designer and simulator application, C++ using Qt framework, Qt View Framework classes like *QWidget, QMainWindow, QGraphicsScene, QGraphicsView*

September 2009 - August 2011
Septa Co.
C#.NET Developer/Architect

- *Development environment*: Windows 7, Windows 2008 R2, TFS, Source Safe, Microsoft Visual Studio 2008-2010, Agile based methodology, etc

- *Projects*: *SeptaNSF; A .NET based Framework, www.1st.ir B2B Portal, PayamGostar Application, Septa Update Center, Septa Automation System*

- *Technologies*: WCF, .NET Framework 3.5, Binary Obfuscation and Protection softwares, SQL Server 2008

2009 June-2009 September
Shabakeh Pardaz Rayaneh Co.
C++ Developer/Architect, C#.NET Developer

- *Projects*: Isfahan Province Electricity Dispatch Center, 121 Call Center, Recording and Archiving System for Isfahan Central Jails Organization

2008 March -2009 June
Aramin IT Co.
C++ Developer/Architect, C#.NET Developer
- *Projects*: Isfahan Province Electricity Dispatch Center, 121 Call Center

EDUCATION

- 2004-2008
University of Isfahan
Isfahan, Iran
Bachelor of Software Engineering

SCIENTIFIC AND PROFESSIONAL SKILLS

- *Computer Science*: Data Structures, Algorithm Design, Automata Theory, Turing Machine and Computation Theory, Linear and Abstract Algebra, Information Theory, Cryptography, Quantum Cryptography and Key Distribution, Quantum Computation, Public Key Infrastructure, Artificial Intelligence and Machine Learning, Relational Databases, Graph Databases, Key-Value Databases, File Systems, Operating Systems, Kernel Architecture, Logical Circuits, Digital Circuits, Analogue Circuits, etc
- *Programming Languages*: C, Embedded C (ARM, AVR), C++, Java, Python
- *Databases*: PostgreSQL (Relational and OO), Oracle RDBMS, MySQL, MongoDB, Apache Cassandra, Neo4j, Redis, etc
- *Operating Systems*: Linux Distros (Ubuntu, Debian, CentOS), FreeBSD
- *Source Version Controls*: Git, SVN, Mercurial
- *Software Engineering and Project Management*: MVP, Agile methodologies (Scrum), RUP, etc
- *Frameworks*: C++ (STL, Boost), Java (Spring Family, Hibernate, Hadoop Family, Mockito, JUnit, etc)

VOLUNTEER

- *Mathematics* Linear and Abstract Algebra, Probability Theory, Information Theory
- *Philosophy* Western Philosophy, Socilogy, Economics, Politics and Humanities
- *Physics* Quantum Physics, Quantum Mechanics, Particle Physics, Relativity, Theory of Everything, Photonics
- *Cryptography* Information Security, Network Security, Security Algorithms, Quantum Information Theory, Quantum Key Distribution, Quantum Cryptography
- *Telecommunications* Modulation, Multiplexing, Codes, Telecommunication circuits, Photonics and optical fibers, IEEE 802.3 Protocols, Information Theory, Coding Theory, Computer Networks, etc
- *Music and musicology* Classic, Rock, Metal, etc