SUMMARY

- A keen software developer with +6 years of work experience and strong educational and professional background.
- Excellent knowledge in algorithm design and analysis, code optimization and advanced data structures.
- Solid knowledge in software engineering and evolutionary development methodologies.
- Deep knowledge of system analysis and database analysis, design and implementation.
- Significant skills in database design and configuration for flexibility and intensive I/O.
- Analytical thinker with strong mathematical background.
- Skilled in image processing techniques and computational geometry.
- Excellent communication skills, time management and teamwork experience.
- A creative problem solver who enjoys challenges and learning new technologies.

TECHNICAL EXPERTISE

C#/ VB .NET, ASP.NET MVC*, LINO HTML, CSS, XML, UX MS SQL, MySQL* WS/WCF/REST MVVM/WPF* Clouding*: AWS, Azure

MS Enterprise library, Entity Framework

Agile/Scrum/XP OOP/OOD, TDD SVN, TFS, Source Safe MS Sharepoint* Java, C/C++, Basic, Pascal Matlab

*prior experience

PROFESSIONAL EXPERIENCES

Giti Group. - Application Developer

Software and Framework Developer WS, WPF, MVVM, OOP/D, C#

July 2014 - Present

- Developing a tool for calculating and presenting security market opportunities to sales and traders.
- This application has being chosen as one of the top 5 strategic products of Citi Technology Group in Oct 2014

Livingston Intl. - Software Development

Nov 2012 - Jan 2014

Software and Framework Developer

WS, WCF, Entity Framework, SQL, MVVM, WPF, OOP/D, C#, Reflection, T4, BizTalk, AOP

- Member of R&D for replacing on-premises database with (MS Azure) cloud services.
- Utilized tools like MS Unity, Entity Framework and MS Enterprise library for Validation, ORM and dependency injection. Used these functionalities for developing application modules that follow MVVM pattern and have WPF GUIs.
- Implemented WCF web services to parse/create brokerage messages. Made tools to read documents to auto generate classes by T4. Developed an application to analyze the content of EDI messages using reflection.

Alcatel-Lucent Genesys Labs. – Proactive Support Service

Sept 2011 - Jan 2012

Software Developer and MS SharePoint Designer (Co-op)

Web Service, REST, WCF, OOP/D, C#, Reflection, Design Patterns, SharePoint, Web Widgets

- Developed a RESTFul Web Service using C# (LINQ, WCF) for reporting system alarms for proactive support analysts. This system is capable of getting alarm definitions in an XML file and compiling them in runtime (Reflection).
- Analyzed the business and collected system requirements (interviews) to improve the performance (mostly non-functional requirements) of the legacy SharePoint collaboration system. Defined new web widgets and templates to fit the business workflow and guided team members to migrate to new system.

CARIS Universal Systems - Core Development Team Software and Framework Developer (Co-op) Agile/Scrum, TDD, Computational Geometry, C++

Sept 2010 - Jan 2011

- Designed an efficient algorithm and developed a tool library to calculate minimum distance between two geometrical objects with enormous number of vertices. This project finished in half of the specified time.
- Used Agile/Scrum methodology (JIRA/Fisheye) for test-driven development of computational geometry C++ libraries based on ISO19107 Spatial Scheme standard.

Parsoft Studio - Database design lead

May 2005- Sept 2009

Software Developer, System Analyst, Database Designer VB/C# .NET, SQL, Data Layer, Table Adapter, Relational Calculus/Algebra, Normalization, UX, OOD

- Analyzed multiple systems and businesses, defined data models (Chen/UML diagram), designed and normalized databases (Triggers, Constraints, MS SQL 2000) and developed the data layer (VB/C# .NET, Table Adapters) of windows and web applications. Ex: Provided instance search for MS SQL database of an online bookstore with more than 2,000 publishers and millions of books.
- Designed user experience and developed interface components for windows and web applications.
- Design a statistical algorithm to calculate customers loyalty for giving discounts
- Developed Production, Sale and Inventory Management applications.

SIDE PROJECTS AND OTHER EXPERIENCES

Designed, developed and administered the website of 9th Annual CNSR 2011 Conference Matlab academic projects: Image Stitching, Neural Networks for Stock Market Prediction, Principal Component Analysis for Object Classification, etc.

3D Viewer: Developed graphic engine using color polarization technique for rendering objects in 3D. **Auto Mesh Generator:** Designed an algorithm and developed the application for generating quadratic meshes required for finite element analysis.

Auto Room View Generator: Developed an automation image processing tool to recognize rugs in raw images, crop them, fix their perspective and show them in different rooms for presenting to the online customers.

EDUCATION

2012 Master of Computer Science

University of New Brunswick (UNB)

Fredericton, NB, Canada

A Distributed Spatial Data Structure: Used a p2p random DS (Rainbow Skip Grapgh) to create a fault tolerant distributed spatial DS for performing orthogonal range searches.

Courses: Spatial DS, Parallel Programing (CUDA), Adv. Algorithm Design, AI, Compiler

2009 Bachelor of Software Engineering

Shahid Beheshti University

Tehran, Iran

Image registration using Radon transform: Used Radom transform to extract line features of images for aligning pictures one based on the other (Application Ex: Camera Panorama)

2002 High School Diploma in Physics and Mathematics

PUBLICATIONS AND ACADEMIC AWARDS

- Two-time winner of the Khawrazmi National Innovation (IROST) Award (Iran 2002 and 2003)
- Nationwide University Entrance Exam, Ranked in the top %0.2 among 0.5 million participants, Iran, 2003.
- Certificate of accomplishment, Mathematical Biostatistics online course, (2012 John Hopkins)
- Proc. of 23rd Canadian Conference on Computational Geometry (CCCG 2011)
- Published a paper in Sensor Network Open Access Journal (2009)

High-Resolution Images with Minimum Energy Dissipation Extracted image features by SIFT method for Image Stitching task.

- Proc. of 5th Iranian Image Processing and Machine Vision Conference (2008)
- Held a workshop in First Iranian Computer Games Seminar (2005)
- Proc. of 1st Students Conference of Shahid Beheshti University (2005)