

Amin Parva

A seasoned software technical team lead and Machine Learning Engineer, who serves as an architect for your products and a leader capable of guiding your team in utilizing AI agents to achieve optimal results and meet business requirements while adhering to agile methodology.

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EXPERIENCE

Machine Learning Engineer/Architect | Athlete Management Technologies, San Diego California usa

Feb 2025-Present

Data Scientist & Machine Learning Engineer specializing in athlete performance analytics and predictive modeling. Experienced in developing end-to-end ML solutions for sports data analysis, from data collection and preprocessing to model deployment on cloud platforms. Proven expertise in analyzing sensor data (gyroscope, accelerometer) to predict athletic performance metrics and game session outcomes. Design the complete pipeline and architect the AI software with AI agents help like cursor.

Technical Skills:

Machine Learning & AI:

TensorFlow, TensorFlow Lite for mobile-optimized models
Random Forest, Neural Networks, and ensemble methods
Model training, validation, and hyperparameter tuning
Predictive analytics for athlete performance metrics

Data Science & Analytics:

Python (SciPy, NumPy, Pandas, Matplotlib, Seaborn)
Statistical analysis and data visualization
Sensor data processing (gyroscope, accelerometer)
Time series analysis and feature engineering

Cloud & Deployment:

AWS SageMaker for model training and deployment
AWS App Runner for containerized applications
Docker containerization and orchestration
MLOps and model versioning

Data Collection & Processing:

Real-time sensor data acquisition
Data preprocessing and feature extraction
Movement pattern analysis and classification
Performance metrics calculation and visualization
Designed and implemented predictive models for athlete performance analysis
Processed and analyzed multi-dimensional sensor data (gyroscope, accelerometer)
Built scalable data pipelines for real-time performance monitoring
Deployed production models using AWS SageMaker and App Runner
Collaborated with sports scientists and coaches to optimize training programs

Key Projects:

SKILLS

Aws sagemaker AI,
App runner AWS
Cursor AI
Docker
API and SPA
.Net9, Web Forms, MVC4,5
Intersystem cache (healthcare systems) Mumps DB,HL7
C# 9,C++,Java,VB
Python, Django
HTML 4,5 , CSS3 ,SASS
JavaScript , AJAX, JQuery ,Angular
JS,backbone JS
DB:SQL Server, MySQL ,Oracle,sqlite3
SEO (search engine optimization)
Basic Linux
Cloud computing :AWS,Azure
MS Build ,Grunt
Agile,scrum management
Leadership
Resource allocation
Python Machine learning
Python numpy scipy
React next js
Snowflake,DreamFactory API
[claude.ai](#),canva.ai
Flutter and mac

*Certifications

Below is a list that includes the validation links

AWARDS

Antech tax Benefits reward for high performance Employees 2024

LANGUAGES

English,Persian

Work Permit

Us Citizen

Movement Prediction Model: Trained neural network to predict movement count in game sessions using sensor data

Performance Analytics Dashboard: Created real-time visualization tools for athlete monitoring

Data Pipeline Optimization: Improved data processing efficiency by 90% through advanced preprocessing techniques

Antech Diagnostics (Mars Inc) — USA,CA,FountainValley- Technical Lead Software

OCT 2015- November 2024

Identifying solutions and best practices, designing software to align with business requirements, and engaging in hands-on coding to enhance quality and efficiency, while conducting code reviews and coordinating with offshore teams in India. Additionally, collaborating with the software team, IT infrastructure team, cloud computing teams, and publishing team to ensure timely project delivery. Over my nine years at Antech, I progressed from Senior Software Engineer to Application Lead. In the last four years, I served as both Scrum Master and Technical Lead on various projects, mentoring developers and supporting the Scrum team, particularly during organizational changes such as the introduction of a new VP or Director. As the Software Technical Team Lead, I was responsible for product design and architecture, participating in scrums, conducting code reviews, and coding features alongside the development team. From 2015 to 2020, I worked as a Senior Software Engineer, successfully delivering five major projects, with a comprehensive list of projects and my specific roles in each available.

The most commonly used technologies included Asp.net, C#, VB.net, React, NextJS, .netCore API, Angular, and Oracle SQL DB,AWS,Azure.

Heska- Antech-2023,2024 <https://www.healthtracks.com/>

Heska, a company acquired by MARS, required significant effort to integrate its software with Antech. This large-scale project, termed 'Elephant', was scheduled to last a year. I led a team of 10 from MARS and served as the liaison with the Heska team. We utilized Oracle, .Net Core API, and ReactJS technologies. Heska specializes in clinical analyzers that operate within clinics and interface with middleware known as Antech APIs.

Health Track-Antech-2021,2024 <https://www.healthtracks.com/>

Antech was acquired by Mars, which provided us with a substantial budget to enhance our client interface base platforms. We initiated collaboration with a vendor, and three of Mars' four software teams participated in the project. My responsibilities included serving as a Subject Matter Expert in specific areas and leading the user interface product team. We utilized the existing Oracle database alongside a .NET API and implemented a new user interface using ReactJS to improve the user experience.

Globalization Antech 2020-2023

Mars traveled to Germany and England, necessitating the implementation of multilingual support for the platform ([online.antech diagnostics.com](https://www.antechdiagnostics.com)) by incorporating five different languages. The project was classified as extra large, and I served as the technical lead for a team of eight members, utilizing the Scrum Agile methodology alongside established technologies such as AngularJS, .NET API, and Oracle DB, while employing JSON files to manage translations.

<http://www.antechdiagnostics.com/2020-2022>

This project involves developing a user interface that integrates with a content management system tailored for the sales and marketing department, enabling them to modify the company's primary website in response to marketing

insights. We utilized Sitecore as the CMS to fulfill this requirement. I led a team of four members on this large-scale project.

Blue Green Publish Antech 2018-2018

In this project, I developed a strategy for publishing that addressed a significant challenge: the risk of code breaking in the production environment upon deployment. To mitigate this, we required a swift rollback capability, while also needing to conduct tests in the production environment. I designed a mechanism that allowed for two production instances to run concurrently, effectively balancing the need for stability and testing. I played a key role as both the creator and implementer of this medium-sized project.

<http://online.antechdiagnostics.com>-Antech-2015,2020

The company transitioned an incomplete initiative from a third-party vendor to our internal team, where I played a pivotal role in completing all functionalities of the Single Page Application (SPA). Additionally, I was responsible for finalizing the user interface using AngularJS and managing the Oracle database backend with .NET. As a senior software engineer, my contributions were essential in retrieving lab data and generating reports for end users, with the project being classified as extra large in scale.

Atlas Antech 2017-2019

The internal communication system for ticketing facilitates interactions between the laboratory using the intersystems Cache software, consulting, customer service, and other departments. It utilizes web forms developed in C# and is integrated with the Antrim system, which operates on Cache Intersystems by mapping the globals. My role in this project, which was of significant scale, involved full-stack engineering.

HL7 Parser Antech 2015-2018

In this project, the entire business logic previously implemented in Momps and intersystems Cache routines has been restructured in .NET to create an API server. This transition aims to eliminate the HL7 process and facilitate real-time access to laboratory data. I served as the Subject Matter Expert (SME) for the integration between Oracle and the Antrim project, which is classified as extra large in scale.

CRM Antech 2015-2017

The client report service for Antech Diagnostics is developed using Angular and C# for the service API, employing a component-based application architecture for the project. As a senior software engineer, I was responsible for the Angular development aspect.

Technijian, USA,CA,Irvine— Senior Eng,Lead

Jan 2015 - OCT 2015

Appointed as a senior engineer, successfully completed two large-scale projects, and subsequently became the lead for smaller projects.

Responsibilities included:

- Designing software architecture for clientportal.technijian.com using an n-tier model
- Developing a three-layer UI, business, and data access layer utilizing the Entity Framework
- Creating comprehensive workflow flowcharts for all project cycles with Microsoft Visio
- Implementing both the UI layer and data access layer effectively
- Establishing security protocols and membership processes
- Designing user interfaces for proposal and contract creation on portal pages using ASP.NET MVC and AJAX
- Conceptualizing the entire layout for webtest.technijian.com and assisting UI developers with JQuery plugin implementation
- Executing SEO optimization strategies for www.technijian.com
- Drafting project proposals for new contracts as part of company responsibilities
- Conducting interviews and hiring new developers for both the India and US teams

ParvaGroup, Iran, Shiraz— *Director, Architect*

July 2008 - Nov 2014

As a co-founder of this company, my initial foray into the IT sector took place in Shiraz, Iran, following my graduation. I was fortunate to have the opportunity to develop websites and applications for small businesses in my hometown, and I successfully assembled a team of eight individuals, here listed my responsibilities:

- Overseeing the design and resource distribution for each major project.
- Guiding the team to fulfill all requirements throughout the four-year period
- Primarily serving as a director while assisting architects in web page development
- Focusing on both user interface and back-end support
- Ensuring successful project delivery through effective leadership
- Collaborating closely with team members to meet project goals
- Managing resources efficiently to optimize project outcomes
- Providing strategic direction to enhance team performance
- Facilitating communication between architects and the development team
- Committing to high standards in project execution

***Certifications**

Scrum Master ;Link:

<https://www.linkedin.com/learning/certificates/04422153c6596a7c609d8de47a13982af24c0ab1d5642a12404f6b4b5e8fe673>

Leadership Fundamentals; Link:

<https://www.linkedin.com/learning/certificates/95936457ddb4f609d5167985da50237e91edb138cd1ecd6f8d76207283f35ad7>

Management in Organization ;Link:

<https://www.linkedin.com/learning/certificates/8a5609108885dc1f70dc9c69d6a77cd928c2b574db2fa5d621191381257d3dad>

<https://www.linkedin.com/learning/certificates/adac985ff50a73879d49970cae312ab553d70d1894be301531f5adb86af1728a>

Advance C# ;Link:

<https://www.linkedin.com/learning/certificates/2768eda5eba53ea085b770ab7ad1a3e45181040a39b9326fba86fba799e8b77>

EDUCATION

Azad University, Iran, Bushehr — *B.B.S. Degree, Electrical Engineering*

OCT 2003 - June 2008

- I obtained a bachelor's degree in Electrical Engineering from Bushehr Azad University in Iran in 2008.

