MARIOJOSE PALMA

Expert in AI, web, mobile, blockchain, and IoT platforms

WhatsApp +1 786.462.8701 | contact@mariojosepalma.com | https://www.mariojosepalma.com

Tech Stack – For a quick overview

1. **Development Frameworks and Languages:**

- C# .NET Framework (3.1, 5, 6, 7, 8, 10)
- C++ 20+, Python
- JavaScript / TypeScript
- Bash, PowerShell
- CUDA (for high-performance GPU-accelerated computing)
- SQL, Kusto, R
- Autofac, IoC (Inversion of Control)

3. **Web Development:**

- ASP.NET, Web Forms, API
- Angular

3. **Cloud Platforms and Services:**

- Azure, AWS
- Azure Service Fabric, Azure Service Bus, Azure Functions
- Docker, Kubernetes
- Windows Server, Ubuntu Server
- Infrastructure as Code (IoC)

4. **Database Management:**

- SQL Server (2008-2022)
- Azure Cosmos DB
- Azure Blob Storage

- Redis, MongoDB, SQLite

6. **Project Management, DevOps and CI/CD:**

- Azure DevOps, Git

- CI/CD Pipelines

8. **Networking, Communication Protocols, Security and Identity Management:**

- OAuth 2.0, SSL, VPNs

- Raw TCP/IP

- gRPC, REST, HTTP, WebSocket

- Azure Active Directory / Azure Entra ID

- Peer-to-Peer (P2P) Networks

10. **Distributed Systems and Architecture:**

- Distributed Applications Architecture

- Microservices Architecture

- High Performance Computing (HPC)

- Fault Tolerance and Resilience Patterns

- Distributed Caching

- Load Balancing Techniques

- Serverless Computing

- Edge Computing

12. **Machine Learning and AI:**

- TensorFlow, PyTorch

- LLM, Transformers, LSTM, Deep Learning, Deep Reinforcement Learning

14. **Blockchain Technology:**

- Hyperledger Fabric

- Bitcoin & Ethereum Smart Contract Development

16. **Quality Assurance and Testing:**

·   Unit Testing

·   Integration Testing

·   End-to-End Testing

Summary

With over fifteen years of experience in software engineering, my expertise is particularly strong in C# and Microsoft technologies, consistently developing adaptable, forward-looking solutions. I bring a solid grounding in technical fundamentals paired with proactive engagement with emerging technologies.

In the realm of backend technology, my capabilities are extensive. I am proficient in designing and implementing sophisticated architectures, including distributed applications and microservices. My work often involves high performance computing (HPC) to ensure scalability and efficiency, employing fault tolerance and resilience patterns to maintain robust systems even under duress.

My expertise also extends to optimizing distributed caching mechanisms and implementing advanced load balancing techniques to enhance system responsiveness and reliability. Additionally, I have developed solutions using serverless computing and edge computing to drive innovation and performance at the edge of network architecture.

In Python, I specialize in developing applications that harness the latest AI and large language models, which has significantly advanced data processing and automation capabilities in my projects. I manage diverse database technologies, from traditional SQL to cutting-edge blockchain applications, ensuring data integrity and speed.

As a strategic leader, I emphasize clear communication and precise alignment of project goals with business objectives, consistently leading to superior project outcomes. My leadership style has proven effective in meeting and exceeding client expectations, fostering a culture of excellence and innovation within my teams.

Looking ahead, I am eager to leverage my comprehensive skills to tackle new challenges and lead impactful projects within a dynamic team environment, continuing to make significant contributions to the field of software engineering.

Experience

ITEL | Software Architect

Jul 2024 - Jan 2026

I led the development of an AI-driven solution to enhance efficiency and accuracy in product matching, contributing to faster claims resolution. The solution utilizes advanced machine learning models and a robust database to evaluate material type, measurements and color for matching products. My role includes system architecture, implementing scalable AI workflows, and ensuring seamless integration into existing processes.

Tech Stack:

· .NET 7/8 C#, JavaScript, Python, PowerShell

· Azure, Docker, Kubernetes

· Git, Azure DevOps

· Azure Entra ID, SSL, VPN

· Distributed Applications Architecture, DDD & CQRS Principles

· Secure Files Management

· Image Classification and LLMs models

QEROS | Lead Software Engineer

Dec 2021 – Jul 2024

I lead the engineering team at QEROS, developing a blockchain platform that enhances data security using a patented architecture combining machine intelligence, post-quantum cryptography, and distributed ledger technology. Our platform processes millions of transactions per second, ensuring data integrity and reducing financial risks.

Tech Stack:

· .NET 7/8 C#, JavaScript, gRPC, PowerShell

· Azure, AWS, Docker, Kubernetes

- Git, Azure DevOps

- OAuth 2.0, Azure Entra ID, SSL, VPN

- Distributed Applications Architecture, LLMs & MPLOps

- Cryptography Algorithms, Secure Files Management

MICROSOFT | Senior Software Engineer

Aug 2021 – Feb 2023

In my role, I enhanced the digital production line for Windows products by developing software that boosted the automation, availability, reliability, scalability, security, and efficiency of distributed release services. I had participation in code reviews, bug triage, and engineering decision-making, influencing design, architecture, and standards for our pipeline services.

Tech Stack:

- C#, .NET 3.1 & .NET 6, ASP.NET, PowerShell, Azure Cosmos DB

- Azure Service Fabric

- Azure SQL, Azure Blob Storage

- .NET Applications (Win, Linux)

- Git, Azure DevOps.

- Azure Service Bus, TCP/IP Connections C#

- OAuth 2.0, Azure Active Directory SSL, VPNs

- Distributed Applications Architecture

- Secure Files Management

CITRIX | Staff Software Engineer

Jan 2021 – Jul 2021

Worked on Secure Browser's back end, bringing automation for logging and benchmarking capabilities that helped our team to troubleshoot issues in a more efficient manner and also to

improve our service based on the data collected. I was using Microsoft technologies and Azure Cloud Infrastructure.

Technologies used:

· C#, .NET 3.1 & .NET 5, WCF, gRPC, PowerShell, Autofac

· Azure Service Fabric, Docker, Kubernetes

· Azure SQL, Azure Blob Storage, Redis

· .NET Applications (Win, Linux)

· Git, Azure DevOps,

· Azure Service Bus, TCP/IP Connections C#

· OAuth 2.0, Azure Active Directory/Entra ID, SSL, VPNs

· Distributed Applications Architecture

· Cryptography Algorithms, Secure Files Management

· Citrix Workspace

MPL.AI | Founder & CTO

Mar 2017 – Jan 2021

As Founder and CTO of MPL.AI, I led the development of an Automated Trading System using .NET technologies and CUDA-enhanced deep learning. This platform focused on minimizing investment risks and automating decision processes within high-frequency trading environments. My oversight of the project lifecycle culminated in a scalable, AI-driven platform proficient in real-time data analysis.

Tech Stack:

· .NET Framework and .NET Core for backend development

· CUDA for high-performance GPU-accelerated computing

· Deep Learning and AI algorithms for predictive analytics

· Secure data handling and encryption techniques

· High-frequency trading system architecture and design

- · Real-time data processing and analysis

- · Collaborative project management and team leadership

VEEDIMS | Senior Software Engineer

Jan 2014 – Mar 2017

I led the development of a data analysis platform initially designed for marine applications, enhancing boat performance through advanced fuel analytics. This back-end platform monitored real-time data, interfaced with other applications to execute dynamic actions based on environmental conditions, and was later adapted for automotive use.

Tech Stack:

- · C#, Javascript, TypeScript, T-SQL, HTML5/CSS

- · Web Application Front-End (Angular)

- · Backend ASP.NET API, a lot of WebJobs Applications

- · Azure SQL, Azure Blob Storage, Redis

- · .NET Applications running on linux environment,

- · Git, Azure DevOps,

- · Azure Service Bus, TCP/IP Connections C#

- · OAuth 2.0, Azure Active Directory

- · Distributed Applications Architecture

- · Compression, Cryptography Algorithms

NETOPEX | Software Engineer

Jul 2011 – Dec 2013

Architected and developed a client application to draw diagrams dynamically taking the data coming from their service providers such as AT&T, Comcast, and others, to physically locate phones in buildings per floor, either landlines or cell phones, for BI purposes.

Tech Stack:

- C#, Javascript, T-SQL, HTML5/CSS

- Silverlight

- ASP.NET API & WCF

- SignalR

- SQL Server

MICROSOFT VENEZUELA | Contract Software Engineer

Feb 2011 – Jun 2011

BBVA Legacy System Migration: At BBVA, I led the development of a solution for migrating data from the AS400 legacy system to SQL Server 2008. This project entailed a sophisticated data mapping process to ensure both accuracy and completeness. Extensive testing was conducted to guarantee secure and error-free data transfer. Additionally, I developed a web application for data entry and verification, a vital component of the quality assurance process.

Microsoft Speaker: In my role as a Microsoft speaker, I had the privilege of sharing my knowledge on various topics, including web development, social media integrations, and mobile technologies. One of my key presentations concentrated on "Socializing" web applications through the "Web Application Toolkit for Social Network APIs" and "Messenger Connect for Developers". I discussed Microsoft's tools for leveraging social media power, and imparted insights on Silverlight and Windows Phone 7 development. My presentations were well-received, providing a valuable platform to engage with fellow industry experts.

Tech Stack:

- C#, Javascript, T-SQL, HTML5/CSS

- ASP.NET API & WCF

- SSRS

- SQL Server

LOURTEC VENEZUELA | Software Engineer & Trainer

Apr 2009 – Feb 2011

Management System Project: Developed an administrative tool to manage financial and human resources using C#, SQL Server 2008, and Windows Forms. This system provided a robust

interface for managing various administrative tasks efficiently.

3M Venezuela Promotions System: Engineered a web application that automated the management and approval processes for product promotions. I designed the back-end architecture using C#, SQL Server 2008, and ASP.NET Web Forms, which included handling and routing queries and integrating the system with other internal applications to enhance operational efficiency.

As a Microsoft Certified Trainer, I led several Microsoft Official Courses and developed introductory courses in C# and SQL Server Development. My courses, tailored to both newcomers and seasoned professionals, covered web development and database management, significantly contributing to participant skill enhancement and career development.

The Microsoft Official Courses I led include:

- 2310C: Developing Web Applications Using Microsoft® Visual Studio® 2008

- 2310D: Developing Web Applications Using Microsoft Visual Studio 2008 SP1

- 10554A: Developing Rich Internet Applications Using Microsoft® Silverlight®

- 2778A: Writing Queries Using Microsoft SQL Server 2008 Transact-SQL

- 2780B: Maintaining a Microsoft SQL Server 2005 Database

- 6231A: Maintaining a Microsoft SQL Server 2008 Database

- 6232A: Implementing a Microsoft SQL Server 2008 Database

VSOFT LEARNING VENEZUELA | Junior Software Engineer

Aug 2008 – Mar 2009

Mobile Web Bank Project: I was part of the team that developed a mobile web application to provide users with easy access to banking services such as account management and credit card applications. My role focused on backend development using ASP and C#, ensuring the app's integration with the mainframe database for secure and seamless data flow.

Point of Sale and Inventory Management System: I helped develop a system designed to enhance retail operations, facilitating efficient inventory control, sales tracking, and reporting. My contributions included implementing SQL Server for the database and integrating features like barcode scanning and real-time inventory updates to boost accuracy and operational efficiency.

Skills & Abilities

Effective Communication, Team Leadership, Problem-Solving, Adaptability, Conflict Resolution, Critical Thinking, Decision Making, Time Management, Mentoring, Active Listening, Negotiation Skills, Creativity, Empathy, Resilience, Positivity, Self-Motivation, Strategic Planning, Diplomacy, Collaboration, Continuous Learning, Cultural Awareness, Ethics and Integrity, Cybersecurity Practices, Agile and Scrum Methodologies, Project Management Tools, Data Encryption and Security, IoT Development.

Courses & Certifications

· 2008

MCTS: SQL Server 2005

· 2009

MCPD: Web Developer

MCTS: .Net Framework 2.0, Web Applications

· 2011

MCPD: ASP.NET Developer 3.5

MCTS: .NET Framework 3.5, ASP.NET Applications

Microsoft Certified Trainer

MCTS: Silverlight 4, Development

· 2012

MS: Programming in HTML5 with JavaScript and CSS3 Specialist

MCPS: Microsoft Certified Professional

MCPD: Silverlight Developer 4

· 2013

MCTS: .NET Framework 4, Data Access

MCTS: .NET Framework 4, Service Communication Applications

MCTS: .NET Framework 4, Web Applications

MCPD: Web Developer 4

- 2014

MCSD: Web Applications

MCSD: Application Lifecycle Management

- 2015

MS: Developing Microsoft Azure Solutions

- 2021

Microsoft Certified: Azure AI Fundamentals

Learning Jira (Server Edition) - LinkedIn

Microsoft Certified: Azure Solutions Architect Expert

Microsoft Certified: Azure AI Engineer Associate

Accessibility in Action

Microsoft Certified: Security, Compliance, and Identity Fundamentals

Microsoft Certified: Azure Developer Associate

Machine Learning with ML.NET – LinkedIn

Using Docker and .NET Core – LinkedIn

- 2022

Software Architecture: From Developer to Architect – LinkedIn

Conflict Resolution Foundations – LinkedIn

Collaborative Leadership – LinkedIn

Leading at a Distance – LinkedIn

Blockchain: Beyond the Basics – LinkedIn

- 2023

Build and Manage High-Impact Teams – LinkedIn

Diversity, Equity, Inclusion and Belonging for Leaders and Managers – LinkedIn

OWASP API Security Top 10: An Overview – LinkedIn

Generative AI in Cloud Computing: Core Concepts – LinkedIn