Alicia Espinoza

(520) 381-9848 | achocoza@gmail.com | https://www.linkedin.com/in/achocoza/

Professional Summary

Software Engineer with over 20 years of experience delivering scalable, high-impact solutions across government, education, and private sectors. Specialized in full-stack development, data engineering, cloud integration, and process automation. Proven ability to lead cross-functional teams, manage complex projects, and drive innovation using Agile methodologies and modern technologies.

Core Competencies

- Programming & Frameworks: Java, Python, C#, VB.NET, PHP, JavaScript, React, Angular, GraphQL, ASP.NET, Swift, COBOL
- Data & Analytics: SQL Server, Oracle, PostgreSQL, MySQL, Power BI, Tableau, QuickSight, SAS, SPSS, R
- Cloud & DevOps: Azure (Data Factory, Cosmos DB, Data Lakes), AWS (Neptune, QuickSight), Git, Azure DevOps
- Development Methodologies: Agile (SCRUM, Kanban), CI/CD, ETL, Data Warehousing, Machine Learning
- Tools & Platforms: NetSuite, SAP ERP 6.0, WPF, Delphi, Power Builder, MATLAB

Professional Experience

R&D Software Engineer II at Space Institute| February 2024 – January 2026

• Develop software in Java and Python for mission operations automation including pointing constraint resolution, flight rule checking, and delivery artifact management.

• Administers and assists in the coordination of assigned programs and projects of Lunar and Planetary Laboratory

• Estimates, prioritizes, plans, and coordinates development and testing activities.

• Works under minimal supervision, consulting with mission team and leadership on complex situations.

• Support backend development in Java with Jakarta EE 10.

• Support web frontend development in JavaScript.

• Gathers software requirements and research possible solutions to meet those requirements.

• Reviews requirements, specifications, and technical design documents.

• Develops, codes, tests, and debugs software and user interfaces.

• Develops and implements algorithms.

- Develops and implements detailed test procedures.

OPUS Inspection – Tucson, AZ, USA

Lead Software Engineer | May 2019 – Oct 2023
- Developed mission operations automation tools for the Lunar and Planetary Laboratory using Java and Python.
- Designed algorithms for flight rule validation, pointing constraint resolution, and artifact delivery.
- Led backend development with Jakarta EE 10 and frontend enhancements in JavaScript.
- Improved ETL performance and SQL queries using Power BI, R, and Python.
- Migrated legacy data warehouses between Azure and SQL Server.
- Integrated and customized NetSuite; coordinated distributed systems using Azure and AWS.
- Applied Agile methodologies with DevOps, SCRUM, and Kanban.

NOVA Home Loans – Tucson, AZ, USA

Full Stack Automation Engineer | May 2017 – May 2019
- Developed automation tools using C#, SQL Server, MDX, GraphQL, and JavaScript.
- Built customized applications with Angular and React.
- Designed ETL pipelines for automated reporting and analytics.
- Collaborated in Agile teams using Jira.

MISOM Technologies – Tucson, AZ, USA

Software Programmer | Jan 2017 – Apr 2017
- Supported the development of business intelligence systems for mining operations.
- Created ETL solutions for automated reporting.

Freelance Consultant – Mexicali, B.C., Mexico

Full Stack Software Engineer | Sep 2008 – Dec 2016
- Delivered interactive web and desktop applications using HTML/CSS, JQuery, C#, C++, Java, and PHP.
- Conducted data analysis with Tableau and SPSS.
- Implemented graph databases using Azure Cosmos DB.

State Committee for Animal Protection (CEFPPBC) – Mexicali, B.C., Mexico

IT Department Manager | Jan 2015 – Jan 2016
- Oversaw IT operations and ensured continuity of services.
- Managed databases in MySQL, SQL Server, Oracle, and Access.

DIF Baja California – Mexicali, B.C., Mexico

Full Stack Software Engineer | Oct 2008 – Jul 2012
- Developed desktop, web, and mobile applications using Delphi, .NET, and C#.

- Integrated SAP ERP 6.0 with custom applications.
- Conducted data analysis using SAS.

Board of Urbanization (JUEBC) – Mexicali, B.C., Mexico

Full Stack Software Engineer | Aug 2004 – Mar 2008

- Maintained internal systems and developed web portals using JavaScript and C#.
- Managed data migration and reporting with Oracle and SQL Server.

Secretary of Infrastructure and Urban Development (SIDUE) – Mexicali, B.C., Mexico

Full Stack Software Engineer | Sep 2002 – Aug 2004

- Developed and maintained helpdesk and administrative systems using Delphi, Visual Basic, and .NET.

Academic Experience

Adjunct Professor

- Polytechnic University of Baja California (2008–2015)
- University of the Valley of Mexico (2014–2015)
- Baja California Institute of Technology (2014)
- College Center of Tijuana (2013–2015)

Education

- Doctorate in Education
  IEU University, Puebla, Mexico | 2012 – 2016
- Master's in Information Technology Administration & E-Business
  Autonomous University of Baja California | 2005 – 2007
- B.S. in Software Engineering
  Technological Institute of Mexicali | 1999 – 2003