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Top Skills

AWS Lambda
Amazon Web Services (AWS)
Data Loading

Languages

German
Spanish
English

Certifications

Applying LLMs in Practice: Core Concepts and Functional AI Solutions for Real-World Implementation

Isabel Escobar Rivas, Ph.D.

LLMs & NLP | Social Science Research | Data Science & Engineering| Nestadia.com Advisory
San Diego, California, United States

Summary

I design and ship context aware end-to-end AI solutions, from RAG pipelines and document intelligence systems to agentic workflows. My work spans the full data lifecycle: statistical modeling, forecasting, data visualization, and ML pipelines that translate complex datasets into actionable intelligence across regulated industries (legal, immigration, telecom), and languages with precision, explainability, and scalability. . 8+ years in B2B enterprise (ServiceNow, Airbnb, Google Fiber) means I translate customer experience into revenue impact and decision-making. Trilingual in English, Spanish, and German.

Experience

Nestadia.com
Advisor
August 2026 - Present (4 months)
United States

Advising Nestadia, an early-stage real estate technology company focused on simplifying cross-border real estate transactions.

Contributing strategic guidance at the intersection of business development, technology, and operational strategy, with an emphasis on scalable processes, market opportunities, and customer experience.

Drawing on experience in data analytics, technology, and legal processes to support the company’s growth and development.

Insight Global
Data Scientist & Engineer – GoogleFiber (via Insight Global)
April 2025 - Present (1 year 8 months)
San Diego, California, United States

Delivering data analytics and engineering solutions to support a major fiber broadband provider’s network capacity and performance planning initiatives.

Key responsibilities include:

- Developing and optimizing dashboards and data visualizations based on large-scale network and OSS/BSS system metrics

- Performing linear and polynomial regression analyses, forecasting models, and correlation analysis to support network planning strategies

- Working with large, complex datasets and applying big data tools and text file ingestion techniques to streamline data workflows

Airbnb
LLM Analytics Data Engineer
February 2024 - January 2025 (1 year)
San Diego, California, United States

- Develop and manage ETL processes for diverse data sources, including demographic data, regulatory information, and social listening insights.
- Use LLMs to process critical open text data including legislation, regulatory documents and stakeholder feedback
- Design and maintain data pipelines to integrate internal and external datasets, supporting predictive analytics for identifying legislative challenges and political engagement.
- Collaborate cross-functionally to create data visualizations enabling comprehensive reporting on regulatory landscapes, leveraging both internal and external data sources

Xplore Immigration
AI Engineering Lead & Product Owner
March 2023 - May 2024 (1 year 3 months)
San Diego, California, United States

• Architected and deployed a production multi-agent AI system for immigration law firms — integrating LLM document classification, RAG-based semantic retrieval with OpenSearch-compatible vector indexing, confidence scoring, and compliance-aware routing logic across agent workflows.
• Designed agent memory systems and context management maintaining coherence across long-running legal document workflows; built vector knowledge bases over proprietary domain data in structured and unstructured formats.

• Built MCP-compatible API interfaces and agent orchestration patterns enabling seamless integration between AI components, external data sources, and client tools — with JWT auth, 4-tier RBAC, and full data isolation per client.
• Led V1→V2 redesign to enterprise multi-tenant platform. 47/47 tests passing. Served as Product Owner for distributed AI team throughout.

ServiceNow
4 years 3 months

Business Insights, Analytics & Data Science Lead
March 2020 - November 2022 (2 years 9 months)
San Diego, California, United States

Senior Customer Experience (CX) Data Science Analyst
September 2018 - March 2020 (1 year 7 months)
San Diego, California

* Create Tableau Dashboards integrating regression analyses results (R) to visualize the effects of key drivers on NPS throughout different customer segments
* Partner with BI Team in the design of new Tableau Visualizations for CX team after the introduction of new NPS survey in 2019
* Served as the primary BI resource to access to customer, product, or usage data required for various analyses
* Researched database to locate, retrieve, and ultimately link operational metrics data to internal VoC data partnering with SMEs within BI and across the business
* Conducted analysis and documentation of customer feedback on product implementation for Director and Executive Level reports
* Designed a longitudinal analysis framework to quantify the financial dollar value in revenue growth resulting from of improved NPS

Teradata
Senior Business Analyst
June 2017 - September 2018 (1 year 4 months)
San Diego, California

* Work with data science team to develop, document and disseminate product capabilities of Workload Analytics; an automated reasoning system that leverages telemetry to improve database systems performance

* Triage internal requirements for UX team and broker customer feedback, mapping business needs to technical specs
* Communicate product capabilities and highlight key technical elements in non-technical, actionable terms

HP
Senior Business Intelligence Analyst
June 2015 - June 2017 (2 years 1 month)

* Manage monthly ink sales forecast for Europe and North America Region, providing detailed projections of sales at the retailer and platform level for ink subscriptions.
* Broker big data requests for ink usage data on an ad-hoc basis.
* Analyzing churn data, integrating voice of customer data of cancellations into reports that inform customer retention strategies.
* Generate reports integrating various sources of data, utilize mixed methodologies add depth and coherence to the data, helping to bring about clarity regarding our customer's experience, their needs and the recommended path forward.
* Visualizing and storytelling of NPS and CRM customer feedback.

TrendSource, Inc.
Senior Analyst
April 2014 - June 2015 (1 year 3 months)
Greater San Diego Area

• Manage all analytic requests from Account Mangers for a market research and strategic consulting firm specializing in customer experience management, consumer insights measurement, and compliance solutions.
• Convert data into insights utilizing inferential parametric and nonparametric statistical models; collaborate in every stage, from the initial research questions formulation to data collection, analysis and visualization.
• Launched Undergraduate/Graduate Internship Program for analytics department.
• Designed Modular Teaching Program for internal capacity building; defined analytics education plan for staff; managed analytics team and increased profitability of projects produced by the team.
• Developed and executed new analytics products and services including brand narrative analysis, ethnographic interviews in "shop alongs" for purchase behaviors, customer journey visualizations and concept mapping.
• Performed data analysis utilizing quantitative and qualitative methodologies and integrated analysis into client facing reports.

The University of Hong Kong

Researcher

September 2012 - August 2013 (1 year)

Hong Kong

• Established and developed a network of relationships with a wide array of external (both institutional and individual) stakeholders to ensure cooperation and participation in qualitative key-informant interviews and survey data collection.

• Responded to ad-hoc requests of diverse community members; drafted scientific reviews of relevant research and assessed areas of vulnerability in social, health-related behaviors.

• Performed complex analysis work, including correlation, regression analysis, structural equation modelling, data visualizations, and data blending from different sources including the performance and analysis of 30 + key informant interviews.

• Provided data blending using SQL language to access data from a variety of sources and prepared reports to assist in intelligence assessments.

City University of Hong Kong

3 years 8 months

PhD Candidate

August 2009 - March 2013 (3 years 8 months)

Hong Kong SAR

• Conducting Quantitative and Qualitative Analysis across various levels of government funded organizations including key informant interviews, documentary analysis, and survey data collection representing both staff and service users.

• Designed and performed research, made evaluations, and drafted recommendations based on mixed methodology analysis of open text interview transcripts, official organizational documents and survey data evaluating programs funded by government for the promotion of social capital.

Researcher/Tutorial Instructor

January 2010 - August 2012 (2 years 8 months)

Hong Kong

• Directed and advised students in the areas of research design and their course project, including setting targets and ensuring timely execution adhering to project management milestones.

• Provided training and guidance regarding analytical methodologies and outcomes, including instruction of quantitative and qualitative research software: SPSS, NVivo and X-sight.

Halle Institute for Economic Research
Research Assistant
February 2008 - April 2008 (3 months)

Conducted Qualitative Research for the U-Know Project of the European Commission interviewing members of the small business community to understand their approach to innovation activities.

University of Erfurt
Teaching Assistant
September 2007 - February 2008 (6 months)

Teaching Assistant for the "Quantitative Analysis and Empirical Methods" class at a graduate level

Helped students complete class assignments and gain experience using the SPSS software for social research

Wildlife Conservation Society
Fall Research Assistant
July 2007 - September 2007 (3 months)

Research assistant for various research projects, conducted qualitative analysis, English-Spanish translation and conducted surveys.

Education

Harvard John A. Paulson School of Engineering and Applied Sciences
Professional Certificate · (February 2025 - February 2025)

UC San Diego Extension
Certificate, Data Science & Vizualization · (2018 - 2018)

City University of Hong Kong
Doctor of Philosophy (PhD), Public Administration · (2009 - 2012)

Universität Erfurt
Masters in Public Policy, Public Policy, NGO Management, International Affairs · (2006 - 2008)

Baylor University

B.A., German · (2003 - 2005)