

Contact

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www.linkedin.com/in/
emilioespositousa (LinkedIn)
eesposito.com (Portfolio)
github.com/EmilioEsposito
(Portfolio)
serniacapital.com (Other)

Top Skills

Artificial Intelligence (AI)
PydanticAI
FastAPI

Languages

Italian (Limited Working)
English (Native or Bilingual)

Certifications

Neural Networks and Deep Learning
ReactJS App Fundamentals
Javascript Basics for Beginners
Python and Flask Bootcamp: Create
Websites using Flask

Honors-Awards

1st Place Team Award in UPMC's
Sustainable Health Care Innovation
Competition
Graduated with High Distinction in
the top 4% of the Penn State Smeal
College of Business
Dean's List 2007-2011
MISM Program Scholarship

Emilio Esposito

Distinguished Engineer & Head of AI Enablement at LegalZoom
New York, New York, United States

Summary

I use data & technology to drive business decisions at scale.

A hands-on leader that enjoys building high energy teams that are business savvy & technically gifted. Passionate about AI, SMB empowerment, & real estate.

My professional career path continues to be heavily influenced from my own experience operating an SMB. I have over 10 years of experience in rental real estate investing & operations, and currently serve as Managing Partner for both Sernia Capital LLC and PANE Partners LLC (40 apartment units under management).

Experience

LegalZoom

4 years 9 months

Distinguished Engineer & Head of AI Enablement

August 2023 - Present (2 years 4 months)

New York, New York, United States

Hybrid Director / Distinguished Engineer role, leading the AI Enablement team.

Shapes the company's AI strategy and leads a cross-functional engineering team to build production-grade platforms and applications that drive high-impact implementations across business domains.

- ◆ Built a unified AI services monorepo using a best-in-class stack centered on FastAPI and PydanticAI, powering internal and external applications.
- ◆ Delivered proof-of-concept and full production rollouts of multiple AI developer tools, including Cursor, Claude Code, and AWS Bedrock.
- ◆ Designed and deployed domain-tuned RAG chatbots for Sales, Support, and Legal.

- ◆ Created a real-time voice-to-voice AI for Sales training using OpenAI's Realtime API, cutting onboarding time and raising agents first-month performance to nearly 300% of plan. MVP to production in 24 hours.

Director, Data Science & Analytics

March 2021 - August 2023 (2 years 6 months)

San Francisco Bay Area

- ◆ Led the entire Data Science organization, managing a team of 16 Data Scientists with stakeholders across Marketing, Product, Operations, and Finance.
- ◆ Directed multiple Data initiatives related to S1 filing, IPO, and quarterly public filings.
- ◆ Collaborated directly with the C-Suite on strategic insights and key data-driven decisions.
- ◆ Recruited and onboarded 8 new hires within the first 6 months, streamlining team expansion.
- ◆ Revamped the experimentation framework, increasing experiment throughput by 8x in 2022, enabling a new commercialization strategy that lifted market share by 15%, resulting in upgraded stock ratings.
- ◆ Upgraded technical infrastructure for entire org by implementing GitHub, PyCharm, Python, Apache Airflow, Google Workspace, Fivetran, and other modern tools into everyday workflows.

Sernia Capital LLC / PANE Partners LLC

Managing Member / VP / Co-Founder

August 2011 - Present (14 years 4 months)

Pittsburgh, Pennsylvania, United States

- ◆ Partial owner & portfolio manager of four multifamily properties, totaling 40 apartment units.
- ◆ Solely responsible for financial strategy and underwriting potential new properties. Makes all decisions regarding financing, earnings distributions, and capital reserves.
- ◆ Leverages technology to automate multiple aspects of the business and property management, including online rent payments, advertisements, tenant applications/screenings, leasing, taxes, and accounting.

Intuit

4 years 3 months

Group Manager, Data Science & Analytics - Finance & Strategy

July 2020 - March 2021 (9 months)

San Francisco Bay Area

- ◆ Led a team of 3 data scientists.
- ◆ Scope of work included all Small Business Group online products, roughly \$2B in revenue.
- ◆ Owned LTV models for all online ecosystem products. The models range from simple Excel models to complex user-level calculations that leverage Python and ML.
- ◆ Led effort to create a unified data pipeline of user-level revenue data, which increased data coverage from roughly 60% to 95% of all revenue.
- ◆ Strategic data analysis, including evaluating potential M&A deals.

Manager II - Data Science & Analytics

January 2019 - July 2020 (1 year 7 months)

Mountain View

- ◆ Led team of 5 data scientists.
- ◆ Led recruiting efforts and conducted dozens of interviews for multiple analytics teams. Personally sourced 4 candidates that resulted in offers.
- ◆ Successfully influenced leadership to approve a holdout cell for a price increase, and drove the execution of the experiment. The experiment results led to subsequent pricing decision that generated >\$50M in annual incremental revenue.

Staff Data Scientist

January 2018 - January 2019 (1 year 1 month)

San Francisco Bay Area

Senior Data Scientist

January 2017 - January 2018 (1 year 1 month)

San Francisco Bay Area

Performs end-to-end "full-stack" analytics for Intuit's Quickbooks Self

Employed Product

- ◆ Adhoc analysis using Python (Pandas) & SQL
- ◆ A/B testing (test design, tracking, & statistical analysis)
- ◆ Visualization (Plotly, Cufflinks, Tableau, Superset)
- ◆ Data pipelines & ETL (bash scripting, ingestion via API, Airflow, MySQL, Hive, Vertica, Redshift)
- ◆ LTV and survival/churn modeling

PNC

4 years 1 month

Portfolio Analytics & Strategy Associate - Asset & Liability Management

November 2013 - August 2015 (1 year 10 months)

- ◆ Analyzed data with SQL, SAS, and Tableau to identify trends, isolate driving factors, and accurately predict future performance on PNC's residential real estate loan portfolio (700K loans with balance of \$50B)
- ◆ Executed predictive data models and produced results for the high-profile government mandated "stress tests"; passing the stress tests is mandatory in order for the bank to pay dividends to shareholders
- ◆ Tested logistic regression data models during development and oversaw ongoing model monitoring
- ◆ Promoted from Level II to Level III Associate in February 2015 for successfully implementing two new SAS models into a Unix production environment for capital reserves (covering \$2B in loans)

Senior Financial Analyst

July 2012 - November 2013 (1 year 5 months)

- ◆ Analyzed financial results of PNC's foreclosed real estate business and international operations in the UK, Canada, and Luxembourg
- ◆ Prepared public filings for the UK Companies House
- ◆ Estimated PNC's Total Loss Exposure on REO assets, the results of which were relayed to executive management including the CFO

Training:

- ◆ Conducted training sessions for all incoming finance trainees on advanced uses of Microsoft Excel
- ◆ Designed the entire training session curriculum, which consisted of 17 training modules and required about 4 hours to complete
- ◆ Covered topics such as vlookups, pivot tables, index matching, array formulas, data validation, logic formulas, VBA, etc
- ◆ Taught 3 classroom sessions plus 2 webinars, each consisting of about 20 trainees
- ◆ Received two formal recognitions for going above and beyond expectations for training

Financial Analyst Trainee - Rotational Development Program

August 2011 - July 2012 (1 year)

Vivisimo (acquired by IBM)

Quality Assurance Intern

May 2008 - May 2009 (1 year 1 month)

Pittsburgh and State College

- ◆ Tested for bugs in Vivisimo's flagship big data product, which is now part of "IBM Watson Data Explorer"

- ◆ Worked with developers to test for bugs throughout each sprint, and participated in daily Scrum meetings
- ◆ Engaged with clients throughout the UAT process
- ◆ Independently identified several key bugs (e.g. javascript injection vulnerability)

Education

Carnegie Mellon University

Master's, Data Analytics · (2015 - 2016)

Penn State University

Bachelor of Science (B.S.), Finance, International Business
(Minor) · (2007 - 2011)

Palazzo Rucellai - Florence, Italy

Summer Study Abroad, Art and History · (2009 - 2009)