CRISTIAN SANCHEZ ARENAS

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SUMMARY

Quantitative investment professional and AI/ML engineer with 6 years across portfolio management, private capital, and production AI systems. Manage multi-asset portfolios, perform manager due diligence, and build the ML models, predictive pipelines, and GenAI tools that drive those investment decisions, from signal research and backtesting through production deployment in live, regulated environments.

CORE COMPETENCIES

Investment & Private Capital: Multi-Asset Portfolio Construction & Rebalancing, Trading Execution (Equity, Fixed Income, Alternatives), Private Equity & Private Credit Due Diligence, Fund-of-Funds Manager Selection, LP Co-Investment Analysis, Asset Allocation (Strategic & Tactical), Factor & Style Analysis, Performance Attribution & Benchmarking, Macro Regime Analysis, Risk Budgeting, Exposure Monitoring, Liquidity Analysis, Capital Call/Distribution Modeling, Investment Committee Support

Quantitative & AI/ML: Predictive Modeling, ML Systems, Time Series Forecasting, NLP/LLMs (LangChain, RAG), Deep Learning, Scikit-learn, TensorFlow, Signal Research, Statistical Modeling, Monte Carlo Simulation, VaR & Stress Testing, Backtesting Frameworks, Regime Classification, Alternative Data Integration, Portfolio Optimization

Engineering & Platforms: Python, SQL, C++, PySpark, Pandas, NumPy, Airflow, Docker, AWS, Azure, CI/CD, REST APIs, Git, Linux, Systems Architecture, BlackRock Aladdin, Bloomberg Terminal, FactSet, Data Vendor API Integration, SIEM

WORK EXPERIENCE

Senior AI Engineer & Portfolio Management Analyst | FEG Investment Advisors, Cincinnati, OH — *Mar 2025 – Present*

- Manage portfolio models across multi-asset strategies spanning public equity, fixed income, hedge funds, private equity, private credit, and real assets within a $90B+ AUM OCIO/Advisory platform. Monitor portfolio exposures, rebalance allocations, and generate trade lists aligned with IPS targets and liquidity constraints.
- Perform quantitative and qualitative due diligence on private capital managers (PE, PC, real assets): analyze fund terms, track records, attribution, dispersion, cash flow pacing, J-curve modeling, and benchmark performance against Cambridge Associates and Burgiss peer universes. Prepare investment memos and present findings to the investment committee.
- Built ML regime classification system predicting risk-on/risk-off market states using momentum factors, credit spreads, yields, fund flows, volatility, macro indicators, and sentiment signals — improved regime detection accuracy by 80% over prior rules-based approach.
- Develop GenAI-powered investment tools: automated portfolio commentary using LLMs (RAG architecture over holdings, market data, and manager quarterly letters), natural-language market analysis digests, and predictive allocation signal models — reduced manual research workload by 35%.
- Architect event-driven data infrastructure: pipelines ingesting real-time market feeds, custodian data, capital call/distribution notices, and manager reporting (Python, SQL, Airflow); automated performance attribution and risk reporting with audit-ready logging under SOC 2 and compliance constraints.

Research Analyst | Colliers International, Cincinnati, OH — *Apr 2024 – Mar 2025*

- Built production LLM application synthesizing property data, comparable transactions, cap rate trends, and market fundamentals into investment-grade CRE research briefs — 4× output speed, analyst-level quality. Developed PySpark ETL pipelines processing 2M+ monthly data points for valuation and deal flow analysis.
- Automated ingestion of offering memoranda, rent rolls, financial statements, and lease abstracts using computer vision (OpenCV, Tesseract OCR) with data-quality validation — saved 20 hrs/week. Embedded audit logging and cybersecurity controls across all analytical pipelines.

Senior Investment Associate | ArLa Capital, Zurich, CH — *Feb 2022 – Apr 2024*

- Developed ML-driven macro regime classification and tactical allocation models for global multi-asset portfolios (equities, sovereign and corporate credit, commodities, FX). Models incorporated cross-asset momentum, volatility regime signals, carry, and macro factor inputs to generate allocation recommendations for the investment committee.
- Conducted manager due diligence and fund selection across public and private strategies; analyzed track records, fee structures, portfolio construction, and risk-adjusted returns.
- Built automated reporting engine — performance attribution, risk decomposition, exposure reporting — cutting month-end close by 45%. Engineered secure data APIs integrating Bloomberg, custodians, and fund administrators under NIST controls.

Investment Analyst | Citi — Wealth Management & Private Banking, Mexico City — *Jun 2020 – Feb 2022*

- Developed Python automation for portfolio monitoring, performance reporting, and allocation drift analysis across UHNW and institutional client portfolios spanning public markets, structured products, and private placements — 22% efficiency gain.
- Analyzed fund performance, manager positioning, and risk exposures for the advisory team.
- Led enterprise-wide rollout of BlackRock Aladdin across WM & Private Banking: configured portfolio analytics, risk scenario tools, and reporting workflows; defined user roles and access controls; trained 80+ investment professionals. Supported product due diligence on alternative investment offerings and structured notes.

EDUCATION & CERTIFICATIONS

University of Colorado Boulder — MS, Computer Science — *Expected Aug 2027*
Coursework: Machine Learning, Deep Learning, NLP, Reinforcement Learning, Statistical Modeling
Escuela Bancaria y Comercial (EBC) — BS, Finance and Banking | GPA: 3.8 — *Class of 2020*
Certifications: Financial Modeling & Valuation Analyst (FMVA®) — CFI | Private Equity Certificate - CFA Institute