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PERSONAL STATEMENT

With over 20 years of experience as a Senior Quantitative Data Business Analyst & Scientist, I am a results-oriented professional who has consistently delivered value in the world of finance. My diverse career has spanned Tier 1 Investment Banks, Asset Management, and Hedge Funds, where I've worked across front-office, middle-office, and finance teams, specializing in Fixed Income, FX, Credit Derivatives & Indices.

I have an established track record of designing, developing, and implementing Trading, Risk and P&L Management IT Systems, empowering trading desks, risk managers, and portfolio teams to make informed decisions. Moreover, I have led digitalization programs that harness Web, UX and AI technologies to enhance operational efficiency.

My expertise extends to process automation, leveraging advanced technologies such as Language Models for Chatbots and Digital Assistants, Bayesian Models for decision-making, Knowledge Graphs for metadata management, and OLAP cube technologies for big data aggregation. I am well-versed in all phases of the software development life cycle, from requirements elicitation to deployment.

I am committed to staying at the forefront of the ever-evolving finance industry and technology landscape, driving innovation and implementing new solutions to ensure business success. As a strong team player, I adapt seamlessly to new challenges and take pride in providing mentorship and support to my colleagues.

I am now actively seeking a hands-on IT/Business Analyst, Data Analyst/Scientist position in Banking, Finance, Insurance, and Technology firms, where I can bring immediate strategic value and apply my skills to solve complex business problems.

PRODUCT KNOWLEDGE

Fixed Income	Bonds, Repos, Futures, Swaps, Cross Currency & Basis Swaps and Exotics
Credit	CLN, Credit Swaps & Credit Indices
Equity & FX	Equity, Equity Index Options; FX Forwards

WORK EXPERIENCE

Legal & General Investment Management (LGIM) — Aug 2021 – to date
Senor Business Data Analyst/Data Scientist (Consultant/via Giant)

LGIM initiated a data lake program built on top of Cloudera/AWS for consolidating **Risk, Position, P&L, Reference, Market, and ESG** data onto a single platform for investment decisions, quantitative research and regulatory reporting.

- As a data analyst, I was responsible for sourcing the **market data** (reference, ratings and prices) from Bloomberg, Refinitiv, Axioma & **Charles River IMS** (**CRIMS**) and making the pricing and reference data available in the data lake for use by Front Office and Quants.
- As a Data SME with a strong quantitative pricing background, I reverse-engineered 220+ Front Office EUC tools (**220+ Excel/VBA workbooks**) to analyze existing data sources and transition them to a data lake (**CRIMS**), reducing reliance on costly data vendor APIs (BBG, Reuters).
- Collaborated with **portfolio managers**, **risk teams**, and **quants** to ensure seamless functionality of existing EUC tools, Portfolio Models and systems following the migration of data sources from legacy databases to cloud data lake platforms.

- I was responsible for capturing & tracking the data requirements and ensure the IT implementation meets the data needs of the front-to-back businesses across the organization.
- As a data analyst, I **modelled** the Instrument, Price, Security, Entity, Ratings, and Accounts data for use by FO & MO.
- As a Data Scientist, I designed and developed **Data Discovery & Lineage**, a self-service tool built on top ok Knowledge Graphs to find the data in the Cloudera data platform.
- To help FO, MO & Quants, I designed & developed self-service **Data Discovery** tools such as a Google-style search engine based on Elastic Search, Large Language Models based Chatbot and Machine Learning based LDA topic model for tagging & classifying the data.
- As a business analyst, I worked with Operational teams to ensure the business processes around the data lake are consistent and accurate. Also worked with IT scrum teams to ensure the implementation meets the business requirements and organise the UAT testing with end users.

Platform: *Cloudera, Domino, AWS, Python, Spark, Machine Learning, NLP, Tableau & Power BI*

UBS Asset Management, Zurich (& Clearstream DB AG) — March 2018 – Aug 2021

Senor Business Data Analyst/Data Scientist (Consultant/via Harvey Nash)

UBS Asset Management initiated a 3 years growth strategy to Digitalize the Fund Centre platform that brings Fund Providers and Fund Distributors to a single B2B platform. This digitalization project enabled UBS to sell the newly revamped B2B Fund Centre platform to Deutsche Borse & Clearstream for $**1.1bn.**

Digitalization involves end-to-end re-development of the current platform using the latest cutting-edge technologies. Some of the features are – (i) google style search for investment funds, (ii) natural language processing (NLP) based robot application to assist the fund specialists, (iii) integration of Morningstar Risk & Performance data, (iv) web-based UX/UI for data visualization, (v) regulatory rules-based engine for assessing the product suitability and (vi) trailer fee calculation engine. My role as a senior business analyst and RAD developer –

- Played bridging role between business, technology, architects and external IT vendors/consultants working at multiple locations: Switzerland, Germany, India, Singapore and Hong Kong.
- Conducted quantitative data analysis by validating the Morningstar risk (Market Risk) & Performance numbers and developed Tableau-based visualization for integration onto the web UI.
- Organised workshops, and interviews (with 12 different banks/insurance clients and 6 fund providers), and conducted surveys with the external fund companies to find out the product features in need by the end users.
- Conducted UX Design workshops to capture the business requirements
- Developed a Google style search engine for funds using the Elasticsearch echo system and NLP-based robot for funds discovery.
- Produces business, functional and IT requirements; performed SIT testing and organized UAT with the business users.
- Managed the end-to-end life cycle of project workstream delivery: business prioritization, planning, estimation, product backlog, sprint cycles, testing and delivery into production.

Platform: *C#, User Experience (UX) Design Workflows, Python, Dialogflow, Elasticsearch, Tableau, Angular JS, D3, SQL/Oracle Server, Excel/VBA, Morningstar & Fund Info*

Credit Suisse, London — Jun 2015 – Dec 2017

Economic Risk Capital (ERC) – Senior Business Analyst/ Data Developer - Quantitative (**Consultant/Via Pontoon)**

Credit Suisse initiated Economic Risk Capital (ERC) Strategic Change Programme to meet the Swiss Regulator (FINMA) regulations to use Economic Capital for Risk Appetite, Limit Management, Capital Management, Adequacy, Performance measurement and incentives. ERC models incorporate stress test features to effectively compute Market Risk and Credit Risk measures under stress scenarios for both trading and banking books.

As a Senior Quantitative BA, my roles and responsibilities include -

- As a Scrum Master facilitated the fully flexible agile framework for the delivery of the ERC platform.

- Act as a bridge between the Modelling team and a team of 12 quantitative developers across three different regions (Switzerland, Poland and India; external vendors - Tata Consultancy/CRISIL/E&Y) for the delivery of the ERC models.
- Worked with quants/research teams in converting ERC methodology documents to BRD/FRD for IT implementation.
- Responsible for liaising and coordinating the data sourcing and cleansing activities from upstream applications such as Trading, Risk & PnL; Treasury, Finance, HR, Market & Reference Data systems.
- Produced the data lineage documentation, Business Process/Target Operating Models from data origination to target consumption.
- Reverse-engineered the existing models for ERC aggregation and allocation and shared the findings with wide stakeholders; produced the BRD/FRD and its IT implementation in the new target platform.

Platform: *C#, Excel, VBA, SQL Server, SSIS, PL/SQL, Tableau, MARS Dashboard, CS Quant Libraries (C++), Bloomberg/Reuters Market Data*

HSBC, London **Jul 2014 – Apr 2015**
BSM XARA - Senior IT Business Analyst (Consultant/Via Capital Edge)

XARA (Cross Asset Risk Architecture) is a regulatory initiated programme for Treasury/BSM (Balance Sheet Management) business to implement a target operating model of real-time trade interfaces between all of BSM's Primary Trading Systems (Murex, Summit, Martini & Bloomberg/Toms) with cross-asset valuation across all of BSM products (Bonds, Repo, Swaps, FRA, Futures, Future Options and Exotics).

- XARA was built on HSBC analytics feeding the near real-time Risk, PnL and VAR to BI/Active Pivot/OLAP/Oracle, a COGNOS-based platform for risk and PnL aggregation and reporting.
- Performed the UAT testing and reconciliation of analytical models to ensure the analytics are consistent with PTS.

Platform: *Java, Excel, Cloudera Data Lake, VBA, R, Oracle Server, PL/SQL, Active Pivot, Business Intelligence Tools, MDX, COGNOS, Murex, Summit, Martini, Bloomberg, Unix*

BlueCrest Capital Management, London **Sep 2012 – Jun 2014**
Senior Quantitative Developer/Data Engineer

- Managed the delivery of Business Intelligence (BI), Big Data & Warehouse Solutions for Regulatory Reporting (BCBS-239, EMIR, MIFID, PRA and PF/CPO). The solution helped the product controllers to generate the reports in days rather than weeks/months.
- Coordinated and performed the complex SIT & UAT of Position, Delta Risk, VAR & P&L aggregation Data Warehouse solution and obtained signoffs by working closely with Operations, Risk Managers, Product Controllers, Treasury, Middle-Office and Compliance teams.
- Performed the gap analysis (As-Is and To-Be), and data-modelling (Staging, Star/Snowflake), documented Business Processes and Target Operating Models and proposed the technical solutions.
- Worked with the Product Controllers and MO to develop a P&L attribution solution to assist them in obtaining the daily sign-off from the trading desk.
- Developed publishing framework to generate Volatility Surfaces for Option (Bond/Equity/Futures) Products using the Quant Libraries and real-time Bloomberg data for the Equity desk.

Platform: *C#, Java, Hadoop/MapReduce, Spark, Excel, VBA, SQL Server, ETL, SSIS, SSAS, SSRS, Power Pivot/BI Tools, Data Modelling, Tableau, MDX, DAX, Murex, Calypso, Reuters.*

JP Morgan, London **Sep 2006 – Sep 2012**
Credit Murex/Emerging Markets - FO Senior IT Analyst/RAD Developer

- Responsible for the development and support of all the applications used by Emerging Markets traders based in London, Moscow, Istanbul, Dubai and Johannesburg.

- Liaised with traders and the treasury department to gather requirements for the development of the funding, collateral and risk aggregation system.
- Enhanced the risk and P&L systems to present a consolidated view of risk for various products traded by the Emerging Markets desk such as Swaps, Bonds, and FX Forwards etc., booked across different systems.
- Performed the Credit Risk, IR Hedging and Dual currency bonds model validation testing & obtained sign-off from QR, Finance and Product Control teams.
- Development of Abacus Scenario Risk Engine, which allowed the NY and EMEA FO desk to run customized scenarios across their trades (600k CDS trade values in 90 seconds) and this risk engine is an instrumental tool for the desk to manage their risk during the Credit Crisis.

Platform: *Murex, Java, Python, Excel, VBA, SQL Server, SSIS, Data Modelling, QlikView, Bloomberg (TOMS), Reuters Market Data, Control-M, Unix Scripts, JPM Quant Libraries.*

EDS – Fortis Bank, ABN Amro & JP Morgan, GE Capital May 2004 – Sep 2006

- Consultant: Prime brokerage for hedge funds, EDI/Corporate Actions, SWIFT integration Retail Banking & Credit Cards & Treasury services.

Education

Harvard University, Extension School Graduate Certificate in Data Science	Jan 2019 - Aug 2020
University of Reading, UK Masters in International Securities and Investment Banking (specialization in Quantitative Finance)	Sep 2005 - Aug 2007
Indian Institute of Technology (IIT), Kharagpur, India Masters in Electrical Engineering (Silver Medal)	Jun 1995 - Dec 1996

Professional Certifications

TABLEAU – Specialist and Associate*	Sep 2019
PRINCE2 – Practitioner*	Feb 2018
CSM – Certified Scrum Master (Scrum Alliance) *	Jan 2018
PRMIA – Professional Risk Manager (PRM)	May 2017
BCS Business Analysis Diploma	Feb 2016
GARP - International Certificate in Banking Risk and Regulation (ICBRR)	Aug 2015
Cloudera Certified Specialist in Apache Hadoop (CCDH)* & HBase (CCSHB)*	Jan & Apr 2015

*Expired/Discontinued

TECHNICAL SKILLS

Languages	Python, C#, Java, Excel/VBA, Python, R and SQL.
Design Tools/Methodologies	Agile/Scrum, UML, OOA, OOD, HP Quality Center, Team City, JIRA.
Databases/Warehouse/BI	Hadoop, Spark, HBase, Sybase, SQL Server, Oracle, SSIS, SSAS/OLAP, SSRS, Power BI, Tableau, QlikView, D3, Elasticsearch.
Trading Platforms	Calypso (V13), Murex (V3.1), Summit (V8), Bloomberg (TOMS) & Reuters
Cloud Platforms	AWS, Google, Domino
AI	TensorFlow & PyTorch - Machine Learning, Deep Learning (Computer Vision) and NLP.