Julian Kaljuvee

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SUMMARY

- Product Owner / Manager with over 10 years of experience, primarily in financial services
- Strong knowledge of product and project management methodologies, data analysis, stakeholder reporting, developing and executing product strategies, conducting market research, and working with cross-functional teams to develop new products
- Professional experience includes UBS, London Stock Exchange (LSEG), Standard Chartered, HSBC, DBRS Morningstar, Nandos UK, Worldremit and Denario

ANALYTICAL & FINANCIAL SKILLS

Fixed Income:	US Treasuries and Agencies, Corporates, European Governments and Agencies, Repos
FX:	Spot, Forward, Non-Deliverable Forward (NDF), Options
IRD:	Swaps, Swaptions, Caps, Floors
Equity Derivatives:	vanilla/listed, exotics/OTC, equity swaps/equity finance, exchange-traded derivatives
Commodities:	metal, energy futures, options and swaps
Regulatory:	Market risk (VaR / FRTB), credit risk, MIFID

TECHNICAL SKILLS

Tools:	JIRA, Confluence, Github, Figma
Databases:	Oracle, MS-SQL, BigQuery, Redshift, Azure SQL / Synapse
Dashboard / BI:	Superset, Looker, Metabase
Languages:	Python, SQL
Cloud technologies:	AWS, GCP, Azure
Financial domain:	Market risk (VaR / FRTB), products: FXMM, IRD, Equity Derivatives, Commodities
Methodologies:	Agile, SCRUM, LeSS (Large-Scale Scrum)

PROFESSIONAL EXPERIENCE

Denario, (www.denario.io) Berlin, DE / Remote Jan 2022 - present

Product Manager / Owner

Business Area: pre series-A Fintech in B2B payments, embedded finance and revenue-based financing (RBF) space
Roadmap and strategy - worked with CEO to define an AI-based product strategy and product roadmap
User interviews - conducted user interviews to prioritise key features
Performance tracking - defined metrics such as OKR / KPIs to track
Market research - performed competitor research and market analysis
AI prototyping - evaluated various Generative AI approaches for new product development (OpenAI integration via LangChain), NER, model fine tuning, RAG (retrieval augmented generation), and PEFT (Parameter Efficient Fine Tuning)

Worldremit, (www.worldremit.com) London, UK / Remote Apr 2021 - Dec 2021

Business Analyst / Product Manager

Business Area: revenue / sales forecasting, cloud migration, reconciliation of EOD and EOM finance activities for a global Fintech
Responsibilities: (i) productionising monthly revenue forecasting engine, (ii) development and deployment of new global finance reconciliation engine against 200+ FX correspondents globally with over 3m monthly transactions in a multi-cloud environment, (iii) calculating KPIs for CFO office such as monthly active users, and cohort analysis, (iv) functional and automated regression testing

Nandos, (www.nandos.co.uk) London, UK Mar 2020 - Mar 2021
Business Analyst / Product Owner (Contract)

Business Area: sales / demand forecasting, data infrastructure development / data lake, POS, loyalty, rota, weather, wifi and geolocation and delivery data integration for a major restaurant chain
Responsibilities: supporting specification and development new data lake / data warehouse (DWH) (billions of historical records), sales forecasting (time series analysis), marketing (Google Ads and AdWords APIs with Budgeting and Campaigns), and customer loyalty data visualization tools. Dashboards in Tableau and Looker for stakeholders to measure KPI data

DBRS Morningstar, (http://www.morningstar.com) London, UK / Frankfurt, DE Jul 2019 – Feb 2020
Credit Risk Consultant / Quantitative Analyst, RMBS modelling

- **Business Area:** structured finance and credit ratings
- **Responsibilities:** supporting development and deployment of EU RMBS rating models for a leading global financial analytics and ratings provider
- **Model building and deployment:** (i) performed exploratory analysis with Jupyter notebooks, (ii) data cleansing and transformation (data sets with over 100m records), (iii) model development, feature engineering and model evaluation with statsmodels, GAM and XGBoost, (iv) presentations to business stakeholders

UBS AG, (http://www.ubs.com) London, UK Jul 2018 – Jul 2019
Sr Business Analyst / Quantitative Analyst, Market Risk

- **Business Area:** FRTB, Market Risk Change / FRTB
- **Responsibilities:** productionising models for the new global strategic risk platform Regulatory programmes included Strategic VaR, LCR and FRTB across multiple asset classes (Equities, FX, Credit, IR) for on of the largest cross-asset market risk platforms in the world
- **Stakeholder management:** liaised with multiple stakeholders such as FO / FO IT (Geronimo, MOR, Murex, RA), MROs (market risk officers) and Risk IT (ARisk)
- **Regulatory:** regulatory programmes included IBOR upgrade, Sensi reporting/Stress testing and strategic VaR / FRTB

HSBC, (http://www.hsbc.com) Paris, FR / London, UK Jan 2018 – Jun 2019
Sr Quantitative Analyst, Traded Risk Analytics / Global Risk Analytics

- **Business Area:** Global Risk Analytics – Traded Risk (IR, FX), IRB Modelling
- **Products:** IR: Callable Range Accruals (CRAN), Bermudan Swaptions, Accreting Swaptions, Spread Options, Quantos; CR: CDS
- **Responsibilities:** model review and validation of existing front-office and market risk models primarily in vanilla and exotic IR products in response to urgent regulatory demands from EBA
- **SABR:** reviewed SABR stochastic volatility implementation and measured the impact using different shock types and sizes on RniV (Risk Not in VaR) portfolio. Methodology included MultiSABR implementation for Spread Options
- **LMM/MMM:** review of Markov Market Model (MMM) based approach to price and calibrate Bermudan Swaption pricing
- **CVAR:** reviewed and measured impact of using different proxy methodologies on VaR Credit products, such as iTraxx indices and regression based methods (linear and non-parametric Kernel methods)
- **Counterparty Risk:** review and validation of enhancements to proposed counterparty risk models under both IMM-CEM and SA-CCR treatment in response to internal reviews and regulatory demand (including review EBA RTS documentation)
- **Backtesting:** performed backtesting of all model enhancements on both actual and hypothetical portfolios and various combinations of current and historical actual vs re-calibrated parameters
- **Programming:** prototyping in Python

Standard Chartered Bank, (http://www.sc.com) London, UK Mar 2016 –Dec 2017
Quantitative Business Analyst, Financial Markets Risk

- **Business Area:**Financial Market Risk, FRTB programme, all asset classes (IR, FX, CM, CR and EQ)
- **Responsibilities:** lead business analyst and project manager for the bank's new risk generation platform, including stress testing, sensitivity reporting, limits management and FRTB programme
- **Software Development Methodology:** used agile software development methodology working directly with developers providing detailed specs and JIRA tickets, and participated in bi-weekly sprint planning meetings
- **FRTB Sensitivity Based Approach (SBA)**: defining business requirements and functional specifications for the sensitivity-based approach (SBA) including enhanced delta and risk charge, default risk charge and residual add on (RRAO), and regulatory capital calculation based on risk weights
- **FRTB Internal Model Approach (IMA)**: defining business requirements and functional specifications for the Internal Model Approach (IMA) including stressed expected shortfall (SES), desk by desk permissioning, Non-Modellable Risk Factor (NMFR) identification, PLAT (PnL Attribution Test), Default Risk Charge and proxy selection methodology
- **Market Data, Product and Risk Factory Taxonomy**: analysing market data gaps and defining firmwide product and risk factor taxonomy to facilitate the rollout of the FRTB programme
- **Model Validation**: working in collaboration with QMR (quantitative model review) and MRA (market risk analytics) teams to perform the validation of market risk related models and methods
- **Stress Testing**:defined requirements and specifications on the new financial markets stress testing programme, including scenario definitions and various shock types (full reval vs predict PnL)
- **Programming:** prototyping in Python

HSBC, (http://www.hsbc.com) London, UK Nov 2015 - Feb 2016
Quant Analyst, Product Control Finance

- **Business Area:** Product taxonomy, book and people hierarchy; all asset classes (IR, FX, CM, CR and EQ)
- **Responsibilities:** defined bankwide product taxonomy for bank wide product hierarchy service. Discussions with model validation, market risk and front office teams to choose the optimal groupwide hierarchy

London Stock Exchange Group / LCH.Clearnet, (http://www.lseg.com) London, UK Jul 2014 –Nov 2015
Quantitative Business Analyst, Groupwide Marekt Risk

- **Business Area:**Groupwide Market Risk / Group Chief Risk Officer (CRO)
- **Products:** IR Swaps, Repos, FX/NDF, Equities, Fixed Income / Treasuries, Metals
- **Historical Simulation VaR:** defined enhancements to the current HistSim VaR and quantified impact from moving to delta-gamma approach to full revaluation method. Worked with the technology team to estimate capacity requirements and optimise processing architecture using grid architecture based on Spark and Hadoop technologies
- **Responsibilities:** definition and development of a non-parametric historical simulation delta-gamma approximation VaR model with volatility scaling for the CRO office use, following the acquisition of LCH.Clearnet by LSEG. End product used directly by the CRO, CEO and group board members
- **Model Validation**: benchmarked and validated the groupwide model against the individual VaR models from different clearing services. Built an independent model testing harness that relied on reading market data and sensitivity inputs and Taylor approximated PnL series by leveraging various computational libraries. Performed review of dozen models per clearing services contrasting and comparing best VaR methodology approaches
- **Backetesting:** performed model backtesting to evaluate model performance against actual realized PnL and provided explanation for breaches / exceptions
- **Software**: data architecture included big-data infrastructure such as Spark, Hadoop/MapReduce interacting with a risk engine written in Scala

Union Bank of Switzerland, (http://www.ubs.com) Zurich, CH, London, UK Jan 2010 – Jan 2014
*Quantitative Business Analyst,*FX, MM and STIR (Short-term Interest Rates), Front Office

- **Business Area:** IRD/FX/MM Front-Office, Market Risk and Finance
- **Responsibilities:** model and system enhancements to the 2nd largest FX/MM and IR front office risk management

system in the world (by volume)

- **New Product & Model Introduction**: Lead in introducing front-to-back models for new products in STIR space; responsible for new product onboarding of new OTC-traded, but centrally (exchange) cleared products and working with risk, PnL management methodologies with central counterparties such as LCH and OMX
- **Market Risk Methodology:** acted as the primary front office methodology contact for all market risk related queries for the given asset class and participated in the roll out of the new VaR model for a group of IR/FX products. The model was based on historical simulation (non-parametric) of risk factors, paramertic model for residual risk and PCA representation of PnL
- **Market Risk Measures and Metrics:** acted as the primary front office methodology contact for introducing new measures and metrics for regulatory front-to-back (F2B) requirements, such as the Volkcer Rule and entity separation / too big to fail
- **Model Validation and Testing:** working with Quantitative Risk Control (QRC) team to perform independent validation and testing of all front-office models

EDUCATION

Harvard University, Cambridge, Massachusetts
BA in Economics
Course work included included Economics, Applied Mathematics, Molecular Biology and Quantum Physics

Columbia University, New York, New York
MSC in Statistics
Studies included Statistics, Probability Theory and Operational Research)

OTHER / PERSONAL

Fintech:	co-founder and advisor to several Fintech startups, including Bondora.com, EstateGuru.co and Investly.co
Linkedin:	https://www.linkedin.com/in/juliankaljuvee/
Github:	https://github.com/kaljuvee/datascience
Blog:	www.medium.com/@kaljuvee
Languages:	Estonian (native), English (bi-lingual), Finnish (fluent), Russian (intermediate), French (intermediate), Swedish (beginner)