



PEAKS²TAILS



TRANSFORM **RISK** INTO **OPPORTUNITY**

TRAINING | SOLUTIONING | MENTORING

ABOUT PEAKS2TAILS

Peaks2Tails is a global leader in Risk Modelling, Quantitative Analytics, and Financial Training, empowering banks and financial institutions to stay ahead of regulatory, technological, and market shifts with insight, precision, and innovation.

Founded in 2018 by seasoned risk professionals **Satyapriya Ojha and Karan Aggarwal**—both holders of the prestigious **FRM**[®] (Financial Risk Manager) and **CQF**[®] (Certificate in Quantitative Finance)—Peaks2Tails was established with a singular goal: to bridge the gap between theory and real-world implementation in financial risk management.

With operations across Singapore, India, and Southeast Asia, we specialize in building deep technical capabilities for credit risk, market risk, and quantitative analytics teams across leading banks, fintechs, and regulatory institutions.



In today's fast-evolving financial landscape, risk is not just a challenge it's an opportunity.



INDUSTRY RECOGNITION

We are proud to be recognized for our impact and excellence:



Best Credit Risk Training Program



Liquidity Risk Solution of the Year

These accolades reflect our commitment to delivering future-ready, high-impact solutions and training in the financial risk domain.

WHAT WE OFFER

○ **Training-**

Our flagship programs are designed for teams and professionals looking to master practical, tool-driven skills in credit risk modelling, IFRS 9/CECL, AI/ML for finance, and Python/R for risk. Delivered by industry practitioners, our training is rigorous, hands-on, and tailored to current regulatory and business demands.

○ **Solutions-**

We support institutions in designing, validating, and operationalizing end-to-end risk frameworks. From PD/LGD/EAD models and scorecard development to transition matrices, stress testing, and IRB alignment—our solutions are implementation-focused and audit-ready.

○ **Mentoring-**

Through our long-term mentoring engagements, we help risk teams evolve from spreadsheet-driven analysis to explainable AI and automated decisioning. Our mentoring covers model governance, validation readiness, and capability building, ensuring sustainable excellence.



**We don't just
teach risk.
We help you
lead with it.**

1. Mastering Credit Risk Modelling

225+ Hours | Excel + Python | End-to-End Implementation

At **Peaks2Tails**, we don't just teach credit risk—we architect mastery. Our Credit Risk Modelling program is a comprehensive journey from loan origination to regulatory capital calculation, designed for banking professionals who want to lead with insight and innovation.

What You'll Learn

- **Foundational Clarity-**
Understand the full loan lifecycle, model categories (Scorecards, Basel, IFRS 9, Stress Testing), and hands-on data preparation using our proprietary MENTOS platform.
- **Scorecard Development-**
Build powerful Application and Behavioural Scorecards. Go beyond stats with policy rules, overrides, reject inferencing, and cut-off optimization techniques using real-world mortgage data.
- **Loss Modelling, PD, LGD & EAD-**
Model every aspect of credit loss using cutting-edge methods:
 - **Survival Analysis, Tobit, Fractional Logit for LGD**
 - **Logistic Regression & Machine Learning for PD**
 - **Component-Based & CCF Regression for EAD**
- **Basel & IFRS 9 Mastery-**
Gain fluency in converting TTC to PIT, term structure modelling, transition matrices, and staging assessments. Implement end-to-end capital charge calculations under the Basel IRB and IFRS 9 regimes.
- **Actuarial & CECL Techniques-**
Explore Actuarial models (Cox, APC, Bayesian), WARM, and Snapshot/Open Pool methods with Excel-driven hands-on training.
- **Wholesale & Low Default Portfolios-**
Model Transition Matrices and address LDP challenges using Pluto Tasche, Bayesian, and Van Der Burgt approaches.

○ **Stress Testing & Model Validation-**

Perform CCAR/DFAST simulations, ARIMA/ARIMAX modelling, and multi-regression VECM models. Rigorously validate scorecards, capital models, transition matrices, and IFRS 9 components using SR 11-07 checklists.

○ **Quant Meets Practical-**

Price loans with RAROC, optimize yields, and apply machine learning (LDA, XGBoost, SVM, Neural Nets) for advanced credit analytics.

Outcome:

You will walk away with not just theoretical proficiency but also the practical ability to implement, validate, and govern complex credit models across the banking spectrum.

SCORES NORMALISATION

Score Normalization

Goal is to score the entire data set
Odds 72 : 1 is anchored at score 660 as per standard
An increment of score 40 doubles the odds of not defaulting

So we have
In (odds) = a + b * Score
ln(72) = a + 660b
ln(36) = a + 620b

Solving b = 0.01732868
 a = -7.16026236

Training + Testing Data Set

Score Distribution

As expected, the score is concentrated at high scores indicating low credit risk

Note that , we are able to derive scores from PD estimates
If softwares produce score as direct output, it's easy to backtrack PD using the same

IRB in BASEL requires accounts to be mapped to a rating.
IFRS/CECL does not require mapping to a rating

	-0.91589321	-0.652455435	-0.785562379	-0.924812	-0.865525003	-0.14029063	-0.337886572	-0.528973758			
Default	Intercept	bureau_score	max_arrears_12m	cc_util	annual_income	num_ccj	emp_length	months_since_recent_cc_delinq	P(1)	ln(odds)	Score
0	-2.91589321	0.848988348	0.446897907	1.1407213	0.324421315	0.182549259	0.519371295	-0.379586857	0.005726	5.156941	710.7988
1	-2.91589321	0.848988348	0.446897907	-0.739993	0.324421315	0.182549259	-0.382216378	-0.359844634	0.042151	3.123443	593.45
0	-2.91589321	1.075105467	0.446897907	1.1407213	0.659648047	0.182549259	0.88879147	1.036190088	0.001549	6.468351	786.4773
0	-2.91589321	0.848988348	0.446897907	1.1407213	0.056834275	0.182549259	-0.180192003	-0.359844634	0.009019	4.699408	684.3955
1	-2.91589321	-0.23210523	-1.708238136	-1.912945	-0.641267459	-0.23210523	-0.306787205	-0.359844634	0.773509	1.22823	342.3343
0	-2.91589321	-0.100424502	0.446897907	1.1407213	-0.641267459	0.182549259	-0.860403885	1.036190088	0.018264	3.984364	643.1319
0	-2.91589321	-0.100424502	0.446897907	1.1407213	0.659648047	0.182549259	0.627726273	1.036190088	0.003639	5.61316	737.1261
0	-2.91589321	1.075105467	0.446897907	1.1407213	0.659648047	0.182549259	-0.180192003	-0.359844634	0.004639	5.36869	723.0183
0	-2.91589321	0.848988348	0.446897907	1.1407213	0.659648047	0.182549259	0.439573656	-0.359844634	0.004361	5.430569	726.5892
0	-2.91589321	0.848988348	0.446897907	1.1407213	0.324421315	0.182549259	0.520370796	-0.379586857	0.005724	5.157279	710.8182
0	-2.91589321	0.848988348	0.446897907	1.1407213	0.659648047	0.182549259	0.519371295	-0.379586857	0.000429	5.447089	727.5425
0	-2.91589321	0.848988348	0.446897907	-0.739993	-0.641267459	0.182549259	-0.306787205	-0.359844634	0.090044	2.313101	546.487
0	-2.91589321	0.848988348	0.446897907	1.1407213	0.659648047	0.182549259	0.211585475	-0.359844634	0.004709	5.353535	722.1437
0	-2.91589321	1.075105467	0.446897907	-0.739993	0.324421315	0.182549259	0.211585475	-0.359844634	0.030131	3.471612	613.5421
0	-2.91589321	-1.178027211	0.446897907	1.1407213	0.324421315	0.182549259	0.627726273	-0.379586857	0.020412	3.871016	636.5908
0	-2.91589321	0.848988348	0.446897907	-1.912945	0.056834275	0.182549259	0.519371295	1.036190088	0.054672	2.850179	577.6806
0	-2.91589321	-0.100424502	0.446897907	-0.739993	0.324421315	0.182549259	-0.306787205	-0.359844634	0.073817	2.52948	559.1737
0	-2.91589321	0.848988348	0.446897907	1.1407213	0.659648047	0.182549259	0.439573656	-0.379586857	0.004407	5.420126	725.9866
0	-2.91589321	-0.652455435	0.446897907	1.1407213	0.324421315	0.182549259	0.519371295	1.036190088	0.007355	4.905014	696.2066
0	-2.91589321	0.848988348	0.446897907	1.1407213	0.324421315	0.182549259	0.211585475	-0.359844634	0.006284	5.063388	705.4

2. Deep Quant Finance

200+ Hours | Excel + Python | From Theory to Trading Floors

Quantitative Finance is the language of the modern financial system—and we teach it fluently. **Peaks2Tails** presents a rigorous, math-intensive program to equip you with the quantitative, computational, and algorithmic skills required to thrive in today's data-driven markets.

What You'll Master

- **The Core Building Block –**
Start with a robust **Math, Python & Stochastic Calculus Primer**, covering everything from Taylor series and convex optimization to Ito calculus and Girsanov's theorem. Learn to simulate stochastic processes and build pricing engines from scratch.
- **Portfolio Science & Optimization–**
Understand Modern Portfolio Theory, Black-Litterman, CAPM, and factor models. Master robust optimization, dynamic asset allocation, and statistical arbitrage with real-world implementation via Python projects and Excel modelling.
- **Derivatives: Theory to Practice–**
 - **Equity Derivatives:** Price Vanilla, Barrier, American, and Exotic options using Binomial Trees, Black-Scholes, Finite Difference & Monte Carlo methods.
 - **Stochastic Models:** Local & Stochastic Volatility (SABR, Heston), Jump Diffusions, COS Method, Affine Jump Processes.
- **Interest Rate & FX Derivatives–**
Price and manage Swaps, Swaptions, FRAs, FX options, and multi-currency curve construction. Dive into post-LIBOR RFR regimes (e.g., SOFR), CCP basis adjustments, and automatic differentiation for sensitivity risk.

- **Credit Derivatives-**
Model and value CDS, CLNs, Basket products using structural and reduced-form (intensity) models. Learn Copula-based dependency structures and hazard rate calibration.

- **Artificial Intelligence in Finance-**
Apply AI/ML to solve real quant problems:
 - Neural networks for derivative pricing
 - XGBoost & Random Forest for forecasting
 - LSTM for time series prediction
 - Reinforcement Learning for portfolio optimization
 - CNNs for volatility surfaces
 - LLMs in algorithmic finance workflows

Capstone Projects

- Stochastic Process Simulation
- Dynamic Portfolio Optimization
- Credit Risk Modeling with Transition Matrices
- Pricing Engines for Derivatives
- Monte Carlo Engines for Path-Dependent Options
- SOFR-Based Interest Rate Curve Construction
- AI Models for Pricing, Risk, and Allocation



200+ hrs | Excel + Python

Master derivatives, portfolio optimization & AI in finance through advanced quant techniques.

BROWNIAN MOTION

dt = 0.01

T = 1

n = 100

Y(T) = 1.52816

T	#	step	walk
0	0	0	0
0.01	1	-0.026	-0.026
0.02	2	-0.0044	-0.0304
0.03	3	-0.2741	-0.3045
0.04	4	-0.0097	-0.3142
0.05	5	-0.0714	-0.3856
0.06	6	0.06969	-0.3159
0.07	7	0.20613	-0.1098
0.08	8	-0.109	-0.2188
0.09	9	-0.0852	-0.3039
0.1	10	0.10424	-0.1997
0.11	11	0.12245	-0.0772
0.12	12	0.4387	-0.034
0.13	13	0.03317	0.0002
0.14	14	-0.0572	-0.0573
0.15	15	0.10665	0.04931
0.16	16	0.02951	0.07882
0.17	17	-0.1693	-0.0905
0.18	18	0.18729	0.09689
0.19	19	-0.1607	-0.0639
0.2	20	-0.0835	-0.1473
0.21	21	0.14109	-0.0062
0.22	22	-0.0425	-0.0487
0.23	23	0.14715	0.09921
0.24	24	-0.1664	-0.0674
0.25	25	0.06057	-0.0068
0.26	26	-0.0657	-0.0725
0.27	27	-0.1799	-0.2525
0.28	28	-0.0187	-0.2711
0.29	29	0.02214	-0.249
0.3	30	0.12223	-0.1267
0.31	31	0.0376	-0.0891
0.32	32	-0.0478	-0.137
0.33	33	0.06693	-0.07
0.34	34	0.01337	-0.0567
0.35	35	-0.0955	-0.1521
0.36	36	0.04368	-0.1084
0.37	37	-0.0679	-0.1764
0.38	38	-0.0599	-0.2363
0.39	39	-0.0403	-0.2766
0.4	40	0.02725	-0.2493
0.41	41	0.05459	-0.1947
0.42	42	0.03902	-0.1557

Random Walk

Histogram of Y(T)

$dW \sim N(0, dt)$

$W(T) = \int_0^T dW \sim N(0, T)$

Brownian Increment
 $E[dW] = 0$
 $V[dW] = dt$

Brownian Motion
 $E[W] = 0$
 $V[W] = T$

HO-LEE CALIBRATION

Ho & Lee Model - Calibration of theta

$dr(t) = \theta(t)dt + \sigma dW$

$r(t) = r(s) + \int_s^t \theta(u)du + \sigma Z\sqrt{t-s}$

$P(t, T) = A(t, T)e^{-r(t)B(t, T)}$

Risk Neutral Calibration

$\sigma = 0.0070$ (calibrated from caplet prices)

$r(0) = 4.520\%$ (rate short end)

$dt = 0.5$

$B(t, T) = T - t$

$A(t, T) = \exp\left\{-\int_t^T \theta(s)(T-s)ds + \frac{1}{6}\sigma^2(T-t)^3\right\}$

(analytical) $\theta(T) = \frac{\partial f(0, T)}{\partial T} + \sigma^2 T$

θ_j

$T_0 = 0$ T_{i-1} T_i T_{j-1} $T_j = T$

$\int_0^T \theta(s)(T-s)ds = \frac{1}{2}\theta_j(T_j - T_{j-1})^2 + \frac{1}{2}\sum_{i=1}^{j-1} \theta_i [(T_j - T_{i-1})^2 - (T_j - T_i)^2]$

$\theta_j = \frac{2}{(T_j - T_{j-1})^2} \left(-\ln P(0, T_j) - r(0)T_j + \frac{1}{6}\sigma^2 T_j^3 - \frac{1}{2}\sum_{i=1}^{j-1} \theta_i [(T_j - T_{i-1})^2 - (T_j - T_i)^2] \right)$

Today	0.00	spot rate	P(0, T) ^{obs}	f(0, T)	θ	A(0, T)	B(0, T)	P(0, T)
T0	0.5	4.5200%	0.977653467	4.520%	0.0008%	1.000000	0.50	0.977653467
T1	1	4.5680%	0.955347625	4.616%	0.388%	0.999520	1.00	0.9553476245
T2								0.933116705
T3								0.910993060
T4								0.889007151
T5								0.867187554
T6								0.845560972
T7								0.824152247
T8								0.802984394
T9								0.782078625
T10								0.761454393
T11								0.741129430
T12								0.721119798
T13								0.701439940
T14								0.682102731
T15								0.663119542
T16								0.644500294
T17								0.626253524
T18								0.608386444
T19								

$\theta(t)$

3. Market Risk & Counterparty Credit Risk

180+ Hours | Python + Excel | Built for Risk, Valuation & Capital Experts

As global financial institutions align with evolving regulations like FRTB and SA-CCR, risk professionals must master both the theoretical frameworks and real-world execution of risk, pricing, and capital strategies. **Peaks2Tails** delivers a powerful, end-to-end program built for Market Risk, CCR, and Regulatory Capital functions.

What You'll Master

- **Python for Risk Modeling –**

Start with foundational and advanced Python modules—then move into building custom classes for:

- **Black-Scholes Pricing**
- **Monte Carlo Simulation for VaR & xVA**
- **Sensitivity Engines for Vanilla & Exotic Options**

- **FRTB Standardized & Advanced Approaches –**

Learn how to calculate capital charges under:

- **SA:** Delta, Vega, Curvature, DRC for Equity, Rates, FX, and Commodities
- **IMA:** IMCC, Backtesting, PLAT

Hands-on Excel & Python-based projects for capital computation and regulatory alignment.

- **Core Market Risk Frameworks–**

Gain fluency in:

- **Value at Risk (VaR) and Expected Shortfall (ES) across asset classes**
- **Taylor Series expansion & Sensitivity Algebra**
- **GARCH, EWMA, EVT, Copulas for volatility & tail modelling**



○ **Derivative Valuation Deep Dive –**

From **Black-Scholes PDEs** to **Term Structure Models** like Hull-White, CIR, Vasicek—develop robust pricing engines across:

- **Interest Rate Derivatives:** Swaps, FRAs, Caps/Floors
- **FX Derivatives:** Forwards, Swaps, xCCy, Options
- **Volatility Modelling:** Local & Stochastic Volatility, Dupire, Greeks, Pathwise Sensitivities

○ **Advanced Sensitivities & Hedging –**

Calculate fast Greeks and sensitivities using:

- **Pathwise & Likelihood Ratio Methods**
- **Tangent & Adjoint Modes for Monte Carlo Simulation**

Apply these in hedging interest rate and FX risks using swaps, swaptions, and forward contracts.

Capstone Projects Include:

- **Python Engine for Monte Carlo VaR & ES**
- **FRTB Capital Charge Simulator**
- **Exposure Engine for SA-CCR and IMM**

○ **Counterparty Credit Risk (CCR)–**

Master modelling of **Expected Exposure (EE)** and **Potential Future Exposure (PFE)** for portfolios across IR, FX, and Equity derivatives. Learn:

- **Netting, Collateral, CVA/DVA, xVA Adjustments**
- **SA-CCR & IMM Capital Charges**
- **BA-CVA & SA-CVA under Basel Regulations**

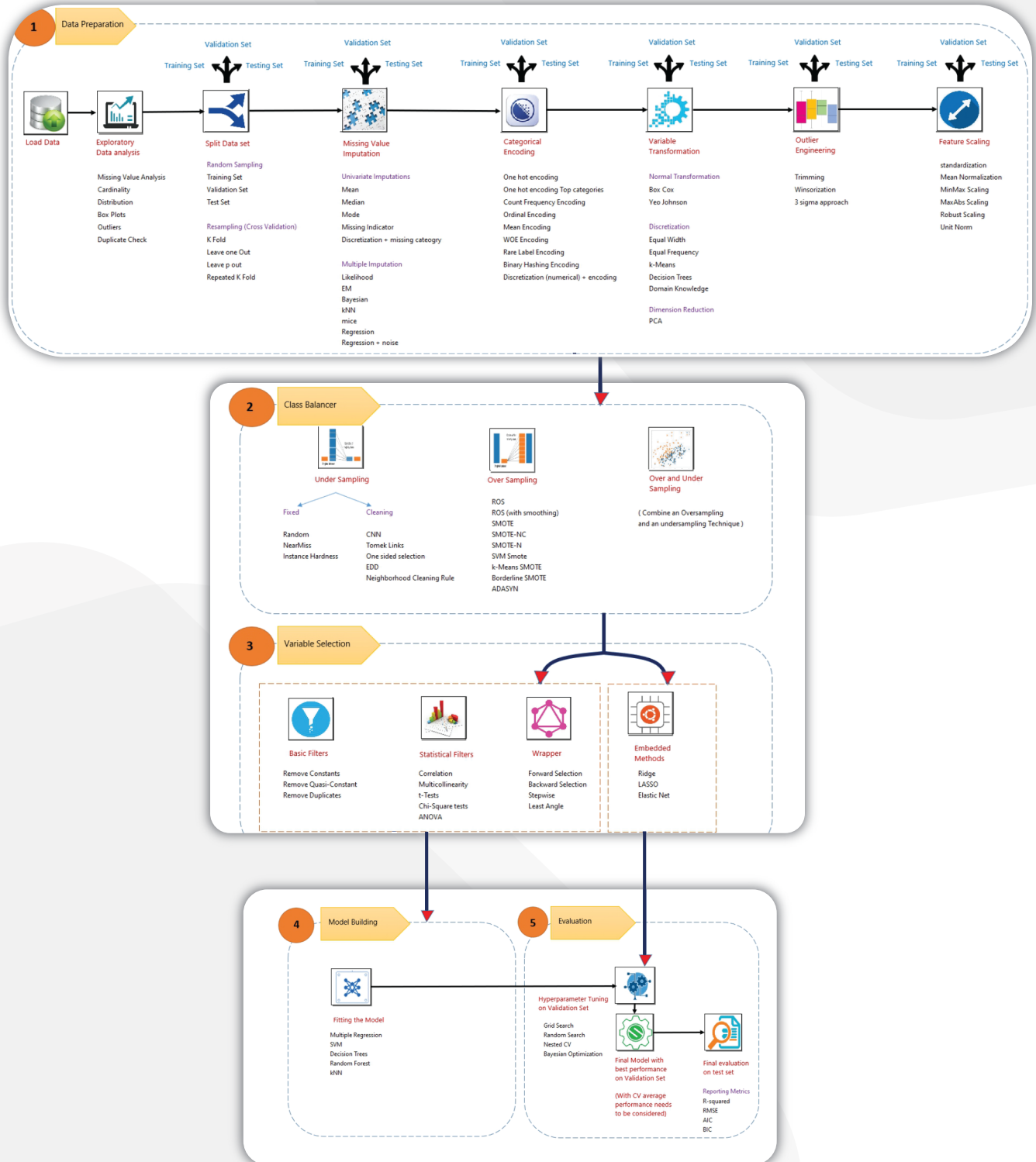
○ **Model Validation for Risk Governance–**

Perform rigorous validation with:

- **Backtesting, PIT Testing, Kupiec & Christofferson Tests**
- **Conditional & Unconditional Coverage Testing**
- **Excel toolkits for FRTB and CVA models**

- **CVA Capital Toolkit for BA-CVA & SA-CVA**
- **Derivative Pricing & Sensitivity Engines**
- **End-to-End Validation Suite for Risk Models**

CLASSIFICATION MASTER PIPELINE



4. Asset Liability Management (ALM)

100+ Hours | Excel + Python | ICAAP | ILAAP | IRRBB Mastery

Managing a bank's balance sheet isn't just a regulatory requirement—it's a strategic advantage. At **Peaks2Tails**, our ALM curriculum empowers Treasury, Risk, and Regulatory professionals to lead with precision, compliance, and forward-looking insight.

What You'll Master

○ **Core ALM Foundations –**

Develop hands-on expertise in:

- **Structural Liquidity Statements (SLS)**
- **LCR & NSFR Computation**
- **IRRBB – NII & EVE Calculations**
- **Fund Transfer Pricing (FTP)**

All modules are supported by real-world Excel models.

○ **Derivative Hedging Techniques–**

Learn to hedge IRRBB and FX exposures using:

- **Linear & Non-linear Derivatives**
- **Valuation Adjustments & Impact Analysis**

○ **Interest Rate & Liquidity Risk Mastery–**

Understand and model:

- **Traditional Gap Analysis**
- **Duration & EVE Calculations**
- **Repricing, Basis, and Yield Curve Risks**
- **Credit Spread Risk in the Banking Book**

○ **Performance & Profitability Analytics–**

Integrate ALM with performance management using:

- **RAROC frameworks**
- **FTP methods** (Single Pool, Double Pool, Matched Maturity)
- **FTP impact** across product lines

○ **Behavioural Modelling of Retail Products –**

Model dynamic balance sheet behavior with:

- **Prepayment & Default Models** using Cox, Logistic, and Linear Regression
- **Credit Card Behavior:** Revolvers, Transactors, Utilisation Trends
- **Fixed Deposit Renewals & Redemptions**
- **NMD Modelling:** Decay Analysis, Jarrow-Van Deventer Survival Models
- **Automatic Option Valuation for Callable Products**

○ **Regulatory Integration: ICAAP & ILAAP–**

Build dynamic, scenario-based capital and liquidity management frameworks:

- **Pillar 1 RWA and Pillar 2 Risk Simulation**
- **Stress Testing & Scenario Design**
- **Management Action Plans & Dynamic Balance Sheet Modelling**

○ **Live Simulation Workshops–**

Engage in experiential learning through:

- **CLEAR OPS: ICAAP | ILAAP | IRRBB Integration**
- **Economic Capital Modelling & Strategy**
- **ProBanker ALM Simulation Game**
- **Liability-Driven Investment (LDI) Scenarios**



100+ hrs | Excel + Python

Model ICAAP, IRRBB, LCR/NSFR, and behavioral risk to manage the banking book.

5. Risk and AI (RAI)

155+ Hours | Excel + Python | The Fusion of Regulation, Risk & Intelligence

Artificial Intelligence is redefining risk—but only if it's responsible, explainable, and grounded in domain knowledge. **Peaks2Tails** delivers an advanced, holistic program that combines machine learning, mathematics, model governance, and regulatory use cases to prepare the next-gen Quant-Risk-AI leader.

What You'll Master

- **Foundations of AI in Risk -**

Start with the building blocks of machine intelligence applied to financial risk:

- Supervised, Unsupervised, Semi-supervised & Reinforcement Learning
- Model Estimation & Performance Evaluation
- Text Mining, NLP & Generative AI (GenAI)
- Fairness, Ethics & Responsible AI
- AI Model Governance & Regulation

- **Real-World Risk-AI Use Cases-**

Apply AI models to solve real financial challenges:

- PCA-based VaR for Fixed Income
- Macroeconomic Forecasting using kNN
- Derivative Pricing via Deep Learning
- Loan Default Prediction
- Anomaly Detection in Payment Systems
- Sentiment Analysis for Market Volatility
- LLMs for Regulatory Interpretation & Bias Detection
- PnL & VaR Forecasting, Liquidity Risk Modelling

- **Quantitative & Math Foundations –**

Master the mathematics that power AI:

- **Multivariable Calculus, Optimization, Vector & Matrix Algebra**
- **Python-based Linear Algebra using NumPy & SciPy**
- **Applied Differentiation, Integration & 3D Geometry for Risk Modelling**

- **Live Workshops & Labs–**

Participate in live labs on:

- **Prompt Engineering**
- **GenAI in Regulatory Use**
- **Text & Modern Learning Techniques**
- **Bias Detection and Explainability for AI Models**

Bonus Learning Paths

- **Math Primer (Functions, Calculus, Linear Algebra)**
- **Python Applications of Algorithms**
- **Intensive Q&A + Problem Solving through self-paced & live support**

Why RAI Matters:

As regulators and institutions demand explainable, auditable AI, the RAI program positions you at the intersection of **ethics, efficacy, and execution**—a rare skillset in today's risk landscape.

It bridges the gap between data science and domain knowledge, enabling responsible innovation in financial services.

From fraud detection to regulatory interpretation, RAI empowers professionals to deploy AI where it matters most.

PROBABILITY DISTRIBUTION

The screenshot displays several probability distribution visualizations and data tables:

- Binomial vs Poisson:** A bar chart comparing Binomial (orange) and Poisson (blue) distributions. Parameters: $\lambda = 5$, $n = 500$, $p = 0.01$.
- Bivariate Normal:** A 3D surface plot of a bivariate normal distribution.
- Normal Distributions:** Two 2D plots showing $Z \sim N(0, 1)$ and $X \sim N(\mu, \sigma^2)$. The area under the curve for Z is 0.27425.
- Joint Distribution:** A 3D bar chart showing a joint distribution with axes x and y .
- Discrete bivariate Case:** A table showing joint probabilities for discrete variables x and y .

y \ x	1	2	3
1	0.1	0.1	0.05
2	0.15	0.1	0.05
3	0.2	0.05	0
4	0.15	0.05	0

LINEAR DISCRIMINANT ANALYSIS

The screenshot displays Linear Discriminant Analysis (LDA) results:

- Class Definitions:** Class 0 $\sim N(\mu_0, \Sigma_0)$ and Class 1 $\sim N(\mu_1, \Sigma_1)$.
- Covariance Matrices:**

	Σ_0	Σ_1	Σ_{pooled}
Σ_0	12.30	-1.44	16.57
Σ_1	-1.44	23.76	0.0733333
Σ_{pooled}	28.87	-1.37	42.41
- Means:**

	μ_0	μ_1	$\mu_0 - \mu_1$
μ_0	27.37	24.6	2.77
μ_1	44.20	30.77	13.43
- Projected Means:**

	μ_0'	μ_1'
μ_0'	50.72	37.12
μ_1'		43.924
- W and θ^* values:**

	W	θ^*
W	0.11099 0.32036	70.89
W	0.1393 0.40207	
- Maximization Results:**

	Value
$\sigma^2_{between}$	184.93
σ^2_{within}	40.1098
Maximize $\frac{\sigma^2_{between}}{\sigma^2_{within}}$	4.611
- Class Default and Projection Data:**

Class	Default ($y=1$)	Class No Default ($y=0$)	Projection of Class 1 on w	Projection of Class 0 on w
μ	24.6, 30.77	27.37, 44.20	36.93	46.22
σ	4.071, 4.32	3.51, 4.87	4.35	3.75
#	x1, x2	x1, x2	w1, x1', x2'	w1, x1', x2'
1	21, 32	1, 26, 46	1, 34.482, 29.557, 17.759	1, 45.978, 39.411, 23.688
2	25, 27	2, 24, 49	2, 35.335, 30.288, 18.199	2, 45.809, 39.266, 23.593

CORPORATE TRAINING PROGRAMS

Tailored Learning. Transformative Result

At Peaks2Tails, we go beyond individual upskilling. Our Corporate Training solutions are designed for banks, NBFCs, fintechs, and consulting firms looking to elevate team capabilities in Risk Modelling, Quant Analytics, and Regulatory Compliance.

Whether you're building foundational knowledge or deep technical expertise, we customize our industry-proven training modules—used by thousands of professionals—for your team's goals, tools, and data. Delivered by practitioners. Backed by real-world case studies. Aligned with business impact.



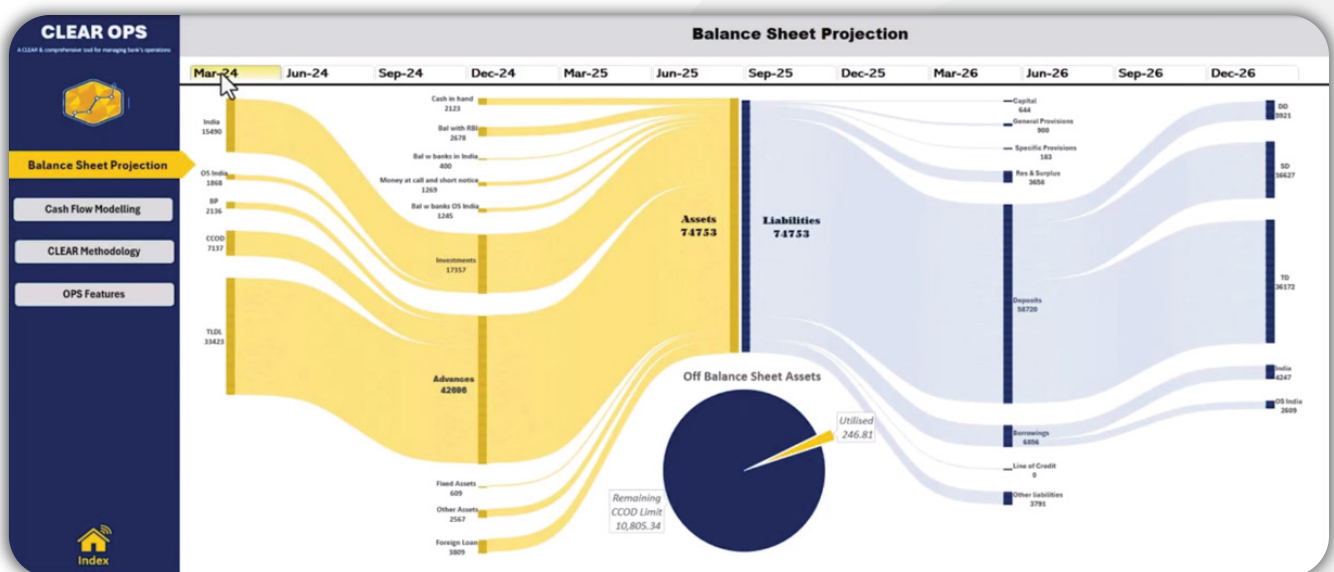
SOLUTIONING THAT WORKS WHERE IT MATTERS

We transform our training expertise into powerful, ready-to-deploy solutions tailored for banks, NBFCs, and fintechs.

- **Custom-built** solutions based on the same models, techniques, and regulatory frameworks we teach
- **Modular & scalable designs**—whether you're a small NBFC or a full-service bank
- **Rapid implementation** with complete documentation, governance packs, and model audit trails
- **Seamless integration** with your existing data architecture and reporting infrastructure
- **End-to-end ownership**—from requirements to deployment, with post-implementation support
- **Trusted by leading institutions** across Credit Risk, ALM, ICAAP, ECL, and Model Validation

CLEAR OPS

Integrated tool for ICAAP, ILAAP & IRRBB Modelling



RISK RAINBOW

Visual framework to define Risk Appetite, Tolerance & Capacity

	Risk Appetite (Normal Times)	Risk Tolerance (Normal Times)	Risk Tolerance (Stressed Times)	Risk Capacity (Normal Times)
Strategic Decisions				
Desired Rating	A	BBB	BBB-	BB
Return on Equity (ROE)	25.00%	22.34%	17.35%	15.00%
Dividend Payout	15.00%	15.00%	10.50%	10.50%
Business Growth	17.00%	23.16%	5.00%	5.00%
Solvency Value Drivers				
Overall CRAR %	20.00%	18.00%	17.00%	11.50%
CET-1 %	19.00%	17.00%	16.00%	8.00%
Provision Coverage Ratio (PCR)	92.00%	92.00%	92.00%	92.00%
Leverage Ratio	17.40%	16.50%	16.50%	3.00%
Profitability Value Drivers				
RAROC	20.00%	20.00%	14.00%	13.00%
Liquidity Value Drivers				
NSFR	110.00%	110.00%	100.00%	100.00%
LCR	120.00%	120.00%	100.00%	100.00%
Conduct Risk Value Drivers				
Conduct Risk Residual Rating	Low Risk	Low Risk	Low Risk	Low Risk

CREDIT SPARK

Comprehensive Loan Pricing engine for dynamic lending strategies

Demography

Age: 29

Marital Status: Married

Income: 600

Education length: 5

Bureau Data

CIBIL Score: 600

Missed Payments: 0

Number of lines: 1

Age of oldest line: 7 (years)

Loan Structure

Product: Mortgage

Amount: ₹3,00,000.00

Term: 12 (months)

Downpayment: 40%

Accounts

Product	Balance Origin	Balance Current	Origination Date	APR	Term
Auto Loan	₹50,00,000.00	1256700	23/01/2017	9%	180

SOLVE

Offer

Status: Accept

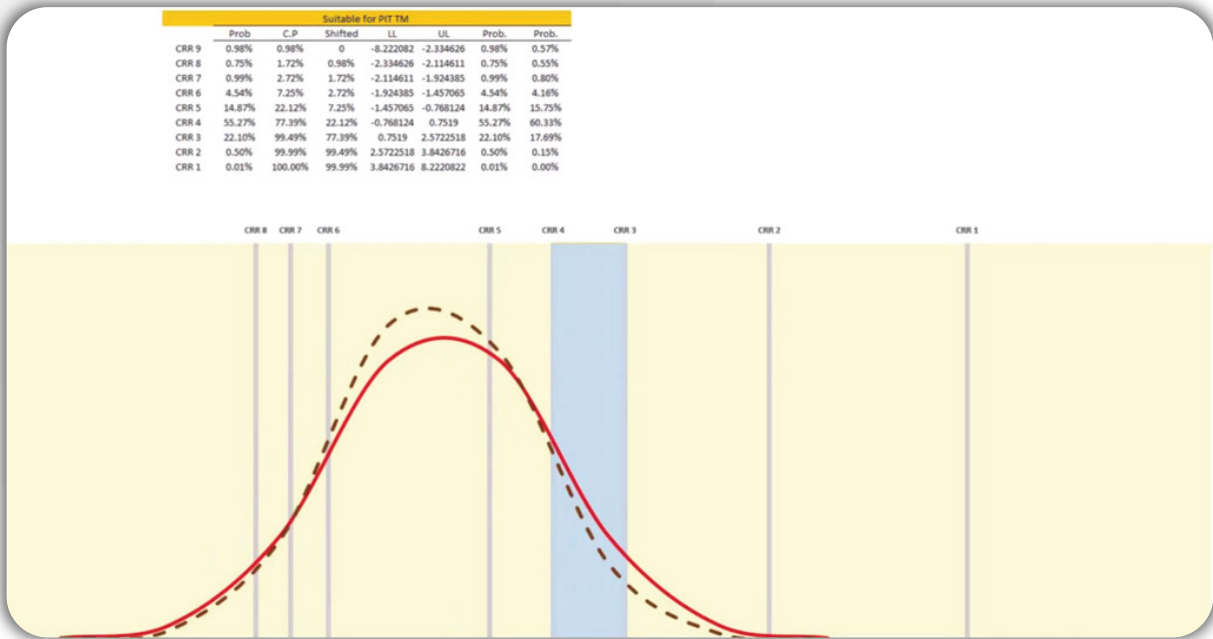
Price: 11.80%

Discount: 0.40%

5.00%

ECL SPARK

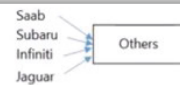
Full-suite IFRS 9/CECL solution for ECL Model Development, Validation & Audit



MENTOS & CHAMPS

Mentoring-led capability building for risk, quants & model functions

Testing Set (After Encoding type and manufact)



#	manufact	sales	resale	type	price	engine_s	horsepow	wheelbas	width	length	curb_wgt	fuel_cap	mpg
10	14.489	17.527	36.125	0	38.9	2.8	193	111.4	70.9	188	3.472	18.5	25
18	25.24825	11.185	18.225	0	31.01	3	200	107.4	70.3	194.8	3.77	18	22
20	45.0926	145.519	9.25	0	13.26	2.2	115	104.1	67.9	180.9	2.676	14.3	27
29	25.63866667	7.854	12.36	0	19.84	2.5	163	103.7	69.7	190.9	2.967	15.9	24
30	25.63866667	32.775	14.18	0	24.495	2.5	168	106	69.2	193	3.332	16	24
35	25.63866667	30.696	20.1045	0	29.185	3.5	253	113	74.4	197.8	3.567	17	23
43	75.29883333	31.038	13.425	1	18.575	3.9	175	127.2	78.8	208.5	4.298	32	16
44	75.29883333	111.313	11.26	1	16.98	2.5	120	131	71.5	215	3.557	22	19
52	203.8238571	63.403	14.21	0	22.195	4.6	200	114.7	78.2	212	3.908	19	21
53	203.8238571	276.747	16.64	1	31.93	4	210	111.6	70.2	190.7	3.876	21	19
56	203.8238571	220.65	7.85	1	12.05	2.5	119	117.5	69.4	200.7	3.086	20	23
64	35.317	66.692	7.825	0	11.799	2	140	100.4	66.9	174	2.626	14.5	27
66	20.97	23.713	19.69	0	29.465	3	227	108.3	70.2	193.7	3.342	18.5	25
69	55.557	80.556	13.775	1	21.62	4	190	101.4	69.4	167.5	3.194	20	20
78	18.3615	48.911	21.725	0	43.33	4.6	215	117.7	78.2	215.3	4.121	19	21
80	15.05633333	26.232	8.325	0	13.987	1.8	113	98.4	66.5	173.6	2.25	13.2	30
82	15.05633333	55.616	10.595	0	17.357	2.4	145	103.7	68.5	187.8	2.945	16.3	25

manufact	Top Majority
BMW	BMW
Cadillac	Cadillac
Chevrolet	Chevrolet
Chrysler	Chrysler
Chrysler	Chrysler
Chrysler	Chrysler
Dodge	Dodge
Dodge	Dodge
Ford	Ford
Ford	Ford
Ford	Ford
Hyundai	Hyundai
Infiniti	Others
Jeep	Jeep
Lincoln	Lincoln
Mitsubishi	Mitsubishi
Mitsubishi	Mitsubishi

MENTORING THAT BUILDS IN-HOUSE CAPABILITY

We don't just deliver solutions—we stay with you to ensure success.

- Ongoing mentoring across **model development, validation,** and review
- **Practical, project-based learning** with your own data
- **Continuous support** through implementation and regulatory audits
- Enables your teams to transition from **dependency to independence**
- Built on the same **high-impact curriculum** we teach professionals



One partner. Training, Solutioning, and Mentoring—all under one roof.

OUR GLOBAL CLIENT REACH

We have delivered high-impact training, advisory, and mentorship to a wide spectrum of organizations, including:

- Leading **private and public sector banks**
- **Regulatory bodies** and **credit bureaus**
- Global **consulting firms** and **fintech innovators**

Whether it's building retail scorecards, designing ICAAP frameworks, or deploying advanced machine learning in credit risk, our engagements go beyond instruction—toward **real transformation**.



5000+ PROFESSIONALS

Trained Across the Risk & Finance Spectrum

From early-career analysts to senior risk officers, Peaks2Tails has trained over 5000 professionals across Asia in areas such as credit risk modelling, IFRS 9, quantitative analytics, Python, and AI in finance. Our participants come from leading banks, fintechs, consulting firms, and regulatory bodies—equipped with skills that are immediately applicable and future-ready.

WHERE OUR ALUMNI WORK

Top Banks. Global Consultancies. Leading Fintechs.





YOUR RISK TRANSFORMATION PARTNER

Peaks2Tails is more than a training provider—we're your partner in building future-ready risk capabilities.

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