

TIMUR YUSUPOV

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London (E14), United Kingdom

WORK EXPERIENCE

- 2007-April 2008 **Quantitative Analyst/Developer** (contract), Investec Asset Management, UK
- ✓ Developed from a raw concept and implemented in R¹ a family of carry-type systematic trading models (FX universe = G10; low frequency; low correlation to other asset classes)
 - ✓ Developed several risk filters, including long volatility for anti-carry trading
 - ✓ Directly communicated to and cooperated with FX execution desk to paper-trade the developed carry system (signal generation, calculation of P&L, assessment of risk)
 - ✓ Cooperated with Risk desk on risk filters, levels of gearing and risk exposure
 - ✓ Monitored and researched industry advances in systematic trading (diverse asset classes)
 - ✓ Actively participated in research meetings of a multi-asset systematic trading group
 - ✓ Presented research and development progress on monthly bases
 - ✓ Conceptualized risk monitoring through news flow and price reactions
 - ✓ Created and administered SQL server databases for FX, interest rates and news
 - ✓ Used Monte-Carlo-type in/out-of-sample simulations to assess limits and robustness of parameters and risk characteristics of developed models
 - ✓ Used analytical mathematical tools to formalize portfolio allocation, levels of gearing, P&L calculation and risk exposure

2003-2007 **Research Associate/Teaching Assistant**, Chair of Monetary Economics and International Finance (Prof. Dr. Thomas Lux), University of Kiel, Kiel, Germany

- ✓ Tutored several courses on:
 - Dynamic Macroeconomic Theory
 - International Investments
 - International Financial Markets
 - International Monetary Economics
 - Pricing in Derivative Markets
 - Empirical Analysis of High Frequency Financial Data
 - Agent-Based Models in Finance and Economics
 - Theory of Financial Markets
 - Mathematical Methods: Dynamical Systems, Dynamic Optimization Techniques and Feedback Control (analytical solutions and numerical techniques)
- ✓ Consulted on analysis of complex dynamic/stochastic systems, including chaotic and bifurcation systems
- ✓ Conducted several seminars on high frequency computational finance and Matlab practice sessions
- ✓ Gave tutorials on advanced mathematics (difference/differential systems and equations)
- ✓ Researched and applied Machine Learning and Genetic Algorithms to financial time series
- ✓ Investigated the impact of transaction costs on profitability in high frequency finance
- ✓ Implemented technical analysis in autonomous systematic trading system
- ✓ Established and maintained several high-frequency financial and macroeconomic databases
- ✓ Performed high-volume data acquisition and processing

2002-2003 **Research/Teaching Assistant**, Charles University, CERGE-EI, Prague, Czech Republic

- ✓ Gave tutorials in microeconomics and macroeconomics in a Distance Learning Project
- ✓ Provided computational assistance to a faculty member at the CERGE-EI
- ✓ Performed research on Genetic Algorithms and Classifier Systems

¹ R is an open source implementation of proprietary S+ statistical/econometrics programming language.

2000-2001 **Executive Officer**, a wholesale company, Izhevsk, Russia

- ✓ Managed sales in the Russian region
- ✓ Organized and supervised company's IT infrastructure
- ✓ Supervised subordinate employees

1998-2000 **Junior Researcher**, Department of Engineering and Quality Control, IzSTU, Russia

- ✓ Researched crash control of complex systems
- ✓ Investigated non-parametric forecasting algorithms
- ✓ Implemented and maintained computer infrastructure of the department

1995-1999 **Programmer and System Administrator**, a wholesale company, Izhevsk, Russia

- ✓ Implemented and maintained user support of logistics and goods database, accounting and management software in a proprietary OO language
- ✓ Maintained company's software and provided user support
- ✓ Organized and maintained company's infrastructure

EDUCATION

2003-2007 **PhD in Quantitative Economics/Finance**, University of Kiel, Kiel, Germany.

THESIS TITLE: *Efficient Market Hypothesis through the Eyes of Artificial Technical Analyst*

- ✓ Accessed the efficient market hypothesis in the Japanese stock market from financial market practitioners prospective
- ✓ Created a fully automated machine learning (Classifier Systems) algorithm to examine systematic trading in the high-frequency stock market environment
- ✓ Applied probabilistic theory and combinatorics to extract trading rules from financial time series in on-line regime
- ✓ Programmed all modules in C/C++ and Matlab with an application of distributed and parallel computing

1998-2000 **MSc (1st Class Hons) in Information Technologies**, IzSTU, Izhevsk, Russia

THESIS TITLE: *Design and Implementation of Non-Parametric Forecasting Algorithm with Provision for Expert Estimates*

- ✓ Improved non-parametric forecasting algorithm to accommodate expert estimates
- ✓ Programmed all modules in C/C++
- ✓ Investigated random number generators

1993-1998 **Diploma in Engineering (MSc equivalent)**, IzSTU, Izhevsk, Russia

TECHNICAL SKILLS

PROGRAMMING

- ✓ C/C++ (more than 10 years; STL, Boost, client-server communication, MPI distributed/parallel computing, SQL integration)
- ✓ VBA (more than 4 years; standalone applications and MS Office integration)
- ✓ Java (familiar; wrote several web applications)
- ✓ Matlab/Octave (more than 5 years; statistical, econometric, optimization and distributed computing toolboxes)
- ✓ R/S+ (advanced level; R is my "weapon" of choice)

DATA MANAGEMENT

- ✓ Bloomberg (R, Excel), Reuters (NewsScope Archive/Live), DataStream Advance (Macroeconomic and daily financial data), NYSE TAQ, DAX and TSE tick-by-tick data

DATA PROCESSING

- ✓ MS Excel, Access (more than 10 years; VBA), MySQL/Postgres (administration), Oracle (power user)

STATISTICS AND ECONOMETRICS

- ✓ R/S+ (advanced level), EViews (familiar; did some coding), Stata (used occasionally), TSP (used occasionally)

PUBLICATIONS

What Makes Speculators Trade More Often? Empirical Analysis on the TSE data (with E. Yusupova), in *Advances in Financial Market Analysis - Financial Markets: Principles of Modeling, Forecasting and Decision Making*, Lodz University Press, 2006

The Efficient Market Hypothesis through the Eyes of an Artificial Technical Analyst: An Application of a New Chartist Methodology to High-Frequency Stock Market Data (with T. Lux), working paper, 2007

LANGUAGE SKILLS English (fluent), Russian (native), German (basic)

SPARE TIME ACTIVITY Aikido, sailing