Curriculum Vitæ

Dr. Patrick Häner

Particulars

Nationality:	Swiss
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Core Competencies

- System Development
  - Project management as well and hands-on contribution through whole lifecycle from defining architecture to roll-out into production of exposure systems
  - Definition and implementation of processes, which are compliant with regulatory requirements (IMM in particular)
- Quantitative Analysis
  - Design and implementation of core analytics for credit exposure systems: all stages of development lifecyle from mathematical definition to integration into production
  - Model validation and model control: implementing best practices, fulfilling regulatory requirements

Computer Languages/Systems

- Used in production systems: C#, Scala/Akka, Java
- For prototyping: Matlab, Mathematica, Python, R, F#
- Infrastructure: RabbitMQ, mongoDB, CouchDB, MySql, Xen Server
- Development process: Git, Bamboo, Jira, JUnit, NUnit
- Third party: Sungard Adaptiv Analytics Extensibility Framework

Work Experience

Aug 2009– *Owner, Häner Consulting*

- Giving courses for model validation, credit exposure and Basel 3 in London, Frankfurt, Singapore, Saõ Paulo, Johannesburg
- Consulting financial institutions in the implementation of credit risk systems
- In-house development of a state of the art pricing and risk system
  - Scaling through combination of virtualization (XenServer), message queueing, (RabbitMQ), fault tolerant actor system (Akka) and NoSql database (mongoDB)
  - Powerful event driven simulation framework
- Defined and implemented back-testing methodology for IMM at *Standard Bank London and Johannesburg* using C#, IronPython, R, Sungard libraries and Microsoft SQL
- Consulting for planning of IMM application programme, in particular gap analysis and resource allocation at *Nordea Copenhagen*; Quantitative advice for backtesting approach
- Consulting at *RBS London* for IMM models; prototyping in C#, F# and Matlab; proof of concept for backtesting infrastructure using CouchDB and .Net

Apr 2006–July 2009 *Director, Global Head Counterparty Credit Exposure Analytics at Nomura London*

- Built up a new credit exposure group consisting of team of quants and developers
- Responsible for defining and implementing credit exposure methodologies
- Built grid based system for IMM compliant exposure estimations
- Contributing to IMM application and discussions with FSA

July 2004–Apr 2006 — *Executive Director in the Derivative Analysis group at Goldman Sachs London*

- Benchmarking and model review credit derivatives
- Spearheading new model control framework

2001–July 2004 — *Global Head Quantitative Risk Methods and Statistics (QRMS) Fixed Income/Credit Derivatives at UBS London*

- Model validation for credit derivatives libraries and systems
- Trade approvals for credit derivatives
- Exposure calculation for exotic trades across all Product lines

1999–2000 — *Co-head QRMS representation UBS Chicago*

- Built up QRMS representation at UBS O'Connor in Chicago
- Responsible for equity models and QRMS IT

1996–1999 — *Member of QRMS at UBS Zurich*
Implemented benchmark models for exotic equity derivatives: extensive experience of PDE, tree and Monte Carlo pricing methods.

Education

1995	Research assistant at the Institute of Theoretical Physics of the Humboldt-University of Berlin
1993–1994	Research assistant at the Institute of Theoretical Physics Basel
November 1993	Doctoral thesis: "Some Investigations on the Sand-Pile Model"
1989–1993	PhD studies in Theoretical Physics at the University of Basel
1983–1988	Studies in Physics and Philosophy at the University of Basel