DR. PETER

Mathematics Department Massachusetts Institute of Technology

SUMMARY OF EXPERIENCE/ QUALIFICATIONS

- Associate Professor and Principal Research Scientist at MIT Sloan School of Management with research focus on statistical modeling in finance; market microstructure modeling of transaction prices and order flows; developed analytics incorporated in the industry-standard Risk-Metrics methodology; currently a Lecturer in MIT Mathematics Department on financial mathematics and statistics.
- Portfolio Manager and Senior Researcher at European hedge fund applying fully systematic quantitative programs in real-time trading of global equities, futures, and currencies.
- Registered investment adviser managing, systematic/quant investment programs in US equities.
- Hedge fund manager exploiting advanced statistical analytics to manage investment programs in equities and futures.
- Registrations: Commodity trading adviser (active) and commodity pool adviser with National Futures Association, investment adviser in Massachusetts (active), Series 3 and Series 65 NASD certifications.
- Consultant to institutions providing customized, advanced statistical analytics for diverse projects in areas of asset management, credit modeling, insurance, and risk management.
- Statistical programming expert in R/S+; developer of "Financial Modeling in S-PLUS" course.
- Active in the design and implementation of proprietary quantitative models for trading, stock selection, capital allocation, hedging and risk management.

PROFESSIONAL EXPERIENCE: ACADEMICS

MASSACHUSESSETS INSTITUTE OF TECHNOLOGY, Cambridge, MA 2013 – pres. Lectureship 2013-

• Department of Mathematics: Financial Mathematics and Statistics

1986- 1995 Principal Research Scientist 1990-1995

- Center for Computational Research in Economics and Management Science (CCREMS)
- International Financial Services Research Center (IFSRC)

Associate Professor of Management Science 1987-1990 Visiting Assistant Professor of Management Science 1986-1987

• Sloan School of Management

2014- pres. **BEIJING JIAOTONG UNIVERSITY**, Beijing, China

Distinguished Visiting Professor, School of Computer and Information Technology

• Global Summer School Faculty

2014-

1986- 1990 NATIONAL SCIENCE FOUNDATION

Mathematical Sciences Postdoctoral Research Fellow

1982-1987 HARVARD UNIVERSITY, Cambridge, MA

Assistant Professor, Department of Statistics 1983-1987 Instructor, Department of Statistics 1982

1979- 1982 UNIVERSITY OF CALIFORNIA, Berkeley, CA

Acting Instructor, Department of Statistics 1982

PROFESSIONAL EXPERIENCE: INVESTMENT MANAGEMENT

1992- pres. **KEMPTHORNE ANALYTICS, INC.** Marblehead, MA USA

President

- Registered investment adviser; designed and implemented investment programs applying proprietary quantitative models for trading and asset allocation in US equities.
- Commodity trading adviser (CTA) registered with National Futures Association; designed and implemented systematic, quantitative futures trading programs.
- Developer of statistical analytics software for securities trading, with exclusive license to hedge funds (Summa Capital and Chronos Asset Management).
- Statistics and statistical programming training: owner/instructor of short course "Financial Modeling in S-PLUS."
- Consultant on projects requiring financial and statistical analytics to institutions in financial and pharmaceuticals industries.

2010 - 2012 **IKOS CIF, LTD** Limassol, Cyprus

Portfolio Manager and Senior Researcher

- Fully systematic, quantitative hedge fund managing \$2.1B (USD) in global portfolios of equities, futures, and currencies.
- Managed and enhanced real-time construction process of equities portfolios, including alpha model evaluation and development, executions analysis and portfolio optimization; risk modeling and management of futures and currency portfolios.
- Research Steering Committee, Chair; managed and mentored researchers; coordinated Oxford Univ. PhD intern program.
- Member of AIMA high-frequency-trading working group.

1996- 2004 SUMMA CAPITAL MANAGEMENT, LLP, Concord, MA USA

Co-founder / Managing Director

- Applied Kempthorne Analytics' proprietary analytic methods to develop statistical trading models and trading systems in US equities; supervised trading and backoffice operations.
- Under the management of Dr. Kempthorne, the Summa Offshore Fund Diversified Portfolio provided investors with returns outperforming the S&P 500 with half the risk.

1995 CHRONOS ASSET MANAGEMENT, LLC, Cambridge, MA USA

Co-founder / Vice President

• Developed and implemented trading models for a quantitative-based hedge fund. Coordinated and supervised all trading and accounting operations.

PROFESSIONAL EXPERIENCE: CONSULTING

CLIENTS OF PAST ENGAGEMENTS

- Citibank
- Colonial/Liberty Funds,
- American Express
- Banque Nationale de Paris
- Canon
- Fidelity Management and Research
- Mathsoft/Insightful Corporation
- Merck
- Sandoz
- RXR
- Princeton Brand Econometrics

EDUCATION

1979- 1982 UNIVERSITY OF CALIFORNIA, Berkeley, CA

Ph.D. in Statistics

• Thesis: Variable Selection and Parameter Estimation in Normal Linear Regression Models

1978-1979 IMPERIAL COLLEGE, UNIVERSITY OF LONDON, London, England

M.Sc. in Statistics, Diploma of Imperial College (DIC) Award

• Thesis: An Analysis of the MDA Breast Cancer Study

1974-1978 HARVARD COLLEGE, Cambridge, MA

A.B. magna cum laude in Applied Mathematics

• Phi Beta Kappa (Alpha Chapter)

BOARD MEMBERSHIPS

1998-2010 **JOHN BERTRAM HOUSE, INC.** Salem, MA

Treasurer

- Non-profit corporation which opened the first assisted living facility in Massachusetts
- Chair of finance committee overseeing management of annual operations budget and trust assets

2005-2010 LYNN HOME FOR YOUNG WOMEN, INC. Lynn, MA

Treasurer

- Non-profit corporation providing room and board for women requiring financial assistance as they pursue employment or college study
- Treasurer and head of finance committee responsible for overseeing management of trust assets