

STEVEN LILLYWHITE

PhD

Currently residing in the US

☎ 347-405-2993

✉ stevenlillywhite2@yahoo.com

www.linkedin.com/in/stevenlillywhite

www.stevenlillywhite.com

PROFILE

Quantitative finance, modelling, programming, communicating.

PROFESSIONAL EXPERIENCE

8/2008 - **Petrobras/BM&FBovespa/IMPA, Rio de Janeiro, Brazil.**

- Developed quantitative finance projects for Petrobras and BM&FBovespa working as a senior member of a consultancy group based at IMPA. Completed projects comprised of modelling reports and software deliverables written in Java and C++.
- Performed modelling and research. Developed and oversaw software development. Wrote reports and manuals. Managed junior members in both quantitative analysis and programming. Gave client presentations and training seminars.
- Projects include: calibration of multi-factor models for pricing natural gas and oil; pricing of exotic options on energy commodities, including swing options; statistical analysis of high-frequency limit order book data on the BM&FBovespa exchange; pricing of oil rig leases and lease options.
- Designed and built equity statistical arbitrage platform based on mean-reverting strategies. Designed and built commodity statistical arbitrage system based on mean-reverting strategies and advanced pricing models. Conducted extensive back-testing for both systems.

6/2007 - 7/2008 **Lehman Brothers, New York, NY.**

- Implemented risk models for portfolio analytics platform used widely in the financial industry. Main features: *factor-based modelling* for general risk analysis and *Monte Carlo simulation* to analyze tail risk, VaR, etc.
- Achieved near total automation of monthly calibration process which drives entire risk model, involving the organization of a large number of data feeds, SAS, Matlab, and Java code.

2/2006 - 3/2007 **Corbin Capital Partners, L.P., New York, NY.**

- Senior member of technology/analytics group at a \$2.4 billion hedge fund of funds.
- Independently supported and developed existing proprietary analytics system including portfolio analysis, portfolio optimizations, risk analysis, time series analysis, investment liquidity modelling, and more.

6/2003 - 2/2006 **Interactive Brokers, Greenwich, CT.**

- Developed software related to brokerage trading activities. Extensive object-oriented programming.

9/1999 - 9/2002 **University of Toronto**, Toronto, ON, Canada, Post-doctoral position in mathematics.

- Published research papers in top journals, spoke at international conferences and seminars.
- Led large, team-taught university math classes as course chairman. Managed group of 10 teaching assistants. Taught basic and advanced calculus, vector calculus, linear algebra, and business math.

9/1998 - 9/1999 **Instituto Superior Tecnico**, Lisbon, Portugal, Post-doctoral position in mathematics.

- Conducted research. Gave workshops and seminars. Worked one-on-one with three students.

EDUCATION

1998 **PhD, Mathematics**, The University of Maryland at College Park.

Dissertation: "The topology of symplectic quotients of loop spaces"

Advisor: John Millson

1995 **MS, Mathematics**, The University of Maryland at College Park.

1992 **BS, Mathematics**, The University of Florida, Gainesville.

COMPUTING

Languages C++, Java, Matlab, R, Perl, Bash Shell Scripting, SQL, PL/SQL

Op. System Linux, UNIX, Windows

Databases Oracle, MySQL

Typography L^AT_EX

AWARDS AND FELLOWSHIPS

- *Phi Beta Kappa*; Elected to the society in 1991.
- *Dissertation Fellowship*; University of Maryland Department of Mathematics, 1997. Award given each year to an outstanding graduate student.
- *GPA*: Undergraduate: 3.94/4.0, Graduate School: 3.94/4.0

LANGUAGES

Portuguese Fluent (*three years living in Brazil, one year in Portugal*)

French Good (*five years of university study*)

Spanish Fair

German Basic (*one year of university study*)