HEITOR CHANG

Rua Itambé, 315, Ap. 9B; São Paulo, SP, Brazil, CEP 01239-001 • +55-11-99479-9809 • heitorchang@gmail.com

EDUCATION

New York University, Courant Institute of Mathematical Sciences, New York, NY
M.S. in Mathematics in Finance, Cumulative and Major GPA 3.4/4.0.   *Sept. 2007 – Jan. 2009*

Stanford University, Stanford, CA
M.S. in Materials Science and Engineering, Cumulative and Major GPA 3.6/4.0.   *Sept. 2005 – June 2007*
B.S. in Mathematical and Computational Science, Cum. GPA 3.7/4.0, Major GPA 3.5/4.0.   *Sept. 2001 – June 2005*

WORK EXPERIENCE

Pontual Exportação e Importação, Ltda.   *Jan. 2011 – Present*
São Paulo, Brazil
Sales Associate and Administrative Assistant, Corporate Gifts and Promotional Items

- Fulfill orders from customers across Brazil and coordinate the workflow of backorders with four coworkers
- Develop scripts in Python and AutoIt to automate the collection and compilation of historical sales volume data of over 500 products, covering the last two years
- Produce sales forecast reports, used to aid in the decision-making process of reordering products and experimenting new offerings

Merrill Lynch & Co., Inc.   *June 2008 – Aug. 2008*
New York, New York
Summer Associate, Global Research

- *Municipal Bonds* – Modeled the prepayment speeds of mortgage revenue bonds and created an Excel spreadsheet to provide more sophisticated price and risk calculations
- *Equity Derivatives* – Backtested the performance of a cash-collateralized portfolio of global futures in equity indices, subject to liquidity constraints, to gauge its feasibility as an investable and structurable global equity index
- *Commodities* – Compared the relationships in historical returns, volatility, and options data of crude oil futures relative to equity indices and oil-related equities

Adair Capital, LLC   *Sept. 2007 – Jan. 2008*
New York, New York
Intern, Hedge Fund of Funds

- Performed Matlab risk analytics on correlations between hedge fund strategies and selected macroeconomic risk factors to characterize the current economic outlook and expected risk-adjusted returns for individual hedge funds.
- Developed a Matlab GUI for a Brownian bridge process based on recursive estimates that measures a hedge fund's exposure to benchmark indices and detects probable shifts in strategy as new performance data becomes available.

Department of Materials Science and Engineering, Stanford University, CA   *Apr. 2007 – June 2007*
Stanford, California   *Jan. 2006 – Mar. 2006*
Teaching Assistant, Introduction to Materials Science

- Created homework assignments and examination questions relevant to current nanotechnology applications, collaborating with another teaching assistant. Focused expertise on mechanical and fracture properties of materials.

RESEARCH EXPERIENCE

Department of Materials Science and Engineering, Stanford University, CA   *June 2005 – Feb. 2007*
Stanford, California
Mechanical Properties Research Assistant, Prof. Reinhold H. Dauskardt Research Group

- Constructed fracture simulations for predicting the mechanical reliability of novel, porous, low-k dielectric materials with applications in microelectronics, optical sensors, and bioengineering.
- Optimized Matlab scripts into C programs, speeding up numerical data collection by about ten times.
- Incorporated C++ geometric algorithms library routines for quantifying random arrangements of atomic free volume.

Carnegie Institution, Stanford, CA   *Mar. 2004 – June 2004*
Stanford, California
Genetics Research Assistant; Dr. Susan S. Thayer Research Group

- Developed Perl scripts for organizing and formatting plants' gene expression data, automating a process that was previously done by hand in Excel.
- Performed statistical and multiple regression analysis of eight data sets in SAS, each with hundreds of gene measurements, identifying statistically significant correlations between them.