Mark Ibrahim

mark.ibhm@gmail.com • (973) 459-8429 • markibrahim.me

EDUCATION

University of Vermont, *Masters in Mathematics (expected May 2016)* Burlington, VT
Sole Instructor: Calculus I (72 students) and Calculus II (38 students)

Hamilton College, *Honors B.A. Mathematics, Magna Cum Laude* Clinton, NY
19th Gold Scholar for student of "highest standards." *Phi Sigma Iota*: highest honor for foreign languages

L'Institut d'études politiques, Sciences-Po Paris, France
Full-year academically intense immersion program, exclusively in French

MATHEMATICS

UVM Research Conference May, 2015, 4.6 million articles analyzed with supercomputer cluster
"What's so special about Philosophy? Unraveling Wikipedia's First Link Network"

Mathematical Association (MAA) Seaway Section 2012, presented senior project on cryptography
"Secret Sharing Schemes using Lagrange and Newton Interpolation"

Seminar Thesis in Statistics 2012, *"The Pursuit of Happiness: engagement, flow, and well-being"*
via Chi-Square testing, Binary Logistic and Ordinal Logistic Regression of World Values Survey

SKILLS AND INTERESTS

- Python (Flask, numpy, pandas, matplotlib), bash, git, VIM, Latex, SQL, fundamentals of html and javascript
  Gighacks Burlington 2015: "most innovative app" **UVM Agile CodeFest:** 1st place winner
- Fluent in oral and written French, selected as course assistant independently leading discussion groups
- Jazz/classical piano, cognitive bias psychology, phenomenology, existentialism, Bob Dylan, good food

FINANCIAL RISK MANAGEMENT

*UBS Graduate Training Program***,** Risk Management New York, NY
UBS Investment Bank, *Fixed Income Market Risk* Feb 2013 - Aug 2014
Revolutionized management of curve exposure, not captured under bank's standard risk framework
- Invented matrix sorting algorithm revealing and ranking $567k of uncaptured sensitivities per basis point
- Identified poor curve positioning via Principal Component Analysis of 6-month sector curve dynamics

Transformed risk metric evaluation of $658m credit portfolio from daily manual 2½ hours to nearly instant

UBS Wealth Management, *Credit Risk, Collateral Evaluation* Jun 2011 - Jan 2013
Single-handedly developed alert algorithm monitoring collateral concentrations against live market data
- GUI in Visual Basic incorporating screened headlines from RSS feeds and alert parameters
- Presented to CRO, CFO who enthusiastically endorsed implementation across all $22bn loan portfolios

ING Investment Management *Equities Research, International Value Portfolio* New York, NY
Portfolio manger purchased $21m position in Malaysian Energy co based on research June - Aug 2010