YUN LI

6485 Booth St., Apt. 4C
Rego Park, NY 11374

413-658-8355
yunli@tepper.cmu.edu

BASIC INFORMATION

- Self-driven, highly motivated and detail-oriented quantitative analyst with 4+ years' experience in financial industry
- US Permanent Resident

SKILLS

- Stats/Math: Very strong analytical, quantitative and problem-solving skills. Wide knowledge and experience in statistical regression/learning/model selection, data mining/machine learning, optimization & global optimization, Monte-Carlo and associated methods.
- Quant finance: Credit risk modeling, derivative pricing, bond pricing, bond spread, credit default swap, interest rates, etc. Stochastic calculus, partial differential equation, etc. Theory and implementation.
- Computer skills: Matlab, C++/C, R, Python, SQL, Linux, Latex, MS Office Suite, etc.

EXPERIENCE

Standard & Poor's — New York, NY
Quantitative Analyst, Associate Director (04/14 -), Associate (01/11 - 03/14) — 01/2011 – present

- Modeling, engineering & validation: Assorted modeling work. Research and development of S&P rating-based and equity market-based CDS term-structure benchmark models to enhance market transparency. Predictive modeling of CDS with popular machine learning techniques. Distance-to-default, probability of default models, imputation methods. S&P Capital IQ fixed income pricing, such as corporate and sovereign bonds, option adjusted spreads, interest rate models. Maintain and improve CDS/OAS Market Derived Signal models for S&P credit surveillance. Model validation: S&P cash flow credit assessment tools.
- Communication: Well developed skills in prioritizing, decision making, time management, and verbal/written communication skills. Wrote S&P Capital IQ Model Based Valuation document.
- Scientific publication (Leisure): Collaborated with scientists at University of Massachusetts and published a robust solution to the world's first general framework to model the bulk chlorine decay process in water distribution system. The solution uses a unique constrained differential evolution to optimize the parameterized ODE array, and uses BIC for model selection. This work solved a long-standing modeling issue with chlorine bulk decay and appeared in *Water Research*, the best peer-reviewed journal in water treatment.

Quantitative Analyst Intern — 05/2010 – 08/2010

- Designed and implemented the validation framework for regression analyses of spreads and probability of default models used in S&P credit surveillance. Validation frame work has been maintained and run daily by the support team ever since.

University of Massachusetts, Amherst — Amherst, MA
Graduate Research/Teaching Assistant — 09/2003 – 08/2009

- Research subjects: Conducted statistical modeling of cosmological structural evolution based on a collection of TB-sized data sets, including the Millennium Simulation, world's largest cosmological *N*-body simulation of galaxy formation at the time. Studied the effects of age on the clustering property of dark halos in the Universe. Made significant contribution to the suitability of modeling techniques of dark matter halo formation and clustering.
- Achievements: 1st-author publications in Astrophysics/Cosmology are well-cited in the field.

EDUCATION

Carnegie Mellon University — Pittsburgh, PA
MS in Computational Finance — 08/2009 – 12/2010

University of Massachusetts Amherst — Amherst, MA
PhD in Astronomy — 09/2003 – 02/2010

- Selected publication: On halo formation times and assembly bias, Li et al., Monthly Notices of the Royal Astronomical Society, 2008, 389, 1419

Chinese Academy of Sciences — Beijing, China
MS In Astrophysics — 09/1999 – 07/2002

Nanjing University — Nanjing, China
BS In Astronomy — 09/1995 – 07/1999