Guojun Zhu

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Education

University of Illinois at Urbana-Champaign   Urbana, IL

Ph.D, Theoretical Condensed Matter Physics, *Sept. 2011*   GPA: *3.85*/4.0
- Thesis topic: Narrow Feshbach Resonance of the Ultra-Cold Fermionic Atoms;
- Developed theoretical model for 3-hyperfine-species ultra-cold Fermion gas,
- Analyzed the model with numeric methods (finite difference, Monte Carlo).

M.S., Finance, May 2006   GPA: 3.85/4.0

Relevant coursework: econometrics, continuous-time finance, financial engineering I/II, hedge fund, investment banking, monetary policy, corporate finance.

M.S., Physics, Dec. 2002   GPA: 3.97/4.0

University of Science and Technology of China   Hefei, Anhui, China
B.S., Physics, May 2001   GPA: 3.8/4.0

Skills

Mathematics: modern probability theory, statistics, stochastic calculus, partial differential equation, Monte Carlo simulation, finite difference;

Computer Languages: Java, C, C++, Javascript, SQL, HTML, R, Pascal, Basic;

Development Techniques: OOP, Design Patterns, Ajax, JavaEE, JSP, Spring, Hibernate, Struts, Maven, SVN;

Software Applications: Excel, Mathematica, MySql, Tomcat, Jetty;

Languages: fluent in English and Chinese.

Sample Projects

- Networked environment for music analysis (http://code.google.com/p/nemadiy/, Spring/Ajax/Hibernate/Mysql, 20K+ lines)
- Digital information risk analysis system (Struts/Ajax/Mysql, 10K+ lines);
- Mini library for pricing vanilla and exotic equity options with binomial tree, Monte Carlo, finite difference methods (C++, 2K+ lines);
- Aggregating academic papers from different online databases and providing uniform searching service (Java/JSP/Perl);
- Multi-factor long-short risk-neutral stock selection model (R);
- Term structure building and interest swap pricing (Excel);
- Numerical solution of the BCS-BEC crossover gap equation (Mathematica).

Experience

University of Illinois at Urbana-Champaign   Urbana, IL
Research Programmer   June 2008 - Jan. 2011
- Developed web applications for various digital information retrieval and analysis projects;
- Designed data access modular, business logic, administrative modular and miscellaneous parts;
- Leveraged various techniques: struts, spring, hibernate, javascript framework (dojo, prototype, jQuery), core design patterns, etc.

Teaching Assistant   Aug. 2001 - June 2008
- Lead discussion/lab sections of physics 101/211 in several semesters;
- Was honored in *Daily Illini*'s list of "**Teachers Ranked as Excellent by Their Students**" for spring 2005 (Physics 101), Spring 2007 (Physics 211).

Illinois Business Consulting   Chicago, IL
Consultant   Jan. 2006
- Worked in a two-person team at **Towers Perrin**;
- Developed and analyze tentative cognitive/functional test battery of elderly people for life insurance underwriting.

Capital Hunter   San Diego, CA
Financial Analyst & Technology Specialist   June 2005 - Aug. 2005
- Analyzed everyday financial data about venture capital and private equity financing;
- Compiled regional quarterly reports on venture capital and private equity financing.