yang.jubiao.rpi@gmail.com

## **EXPERIENCE** Trading Strategist

Goldman Sachs - Systematic Trading Strategies

**10/10/2016 -**200 West Street, New York, NY

- Developing and backtesting systematic strategies for investors, with primary focus in commodities space; analyzing robustness of performance, attribution of losses and gains, and sensitivity to signals.
- Maintaining front-office modeling and risk systems to capture market risks of trades that the firm has entered into with clients and other market participants.
- Developing front-to-back automation tools for internal setup, due diligence checks, and documentations generation for systematic strategies, improving workflow efficiency and documentation accuracies, and streamlining strategy setup processes.
- Collaborated across different teams to create a web-interfaced backtesting and portfolio
  rebalancing environment, extending partial accessibility of internal backtesting and settlement systems to external clients, in order to increase client base and to grow potential
  business opportunities across different business units.
- Implemented automated regression tests for systematic strategies to meet regulatory requirements for governance, control, and due diligence.
- Implemented automated reporting for internal and external users in order to analyze performance of systematic strategies as well as market risks and exposure.
- Collaborating with and supporting sales and trading teams on developing new products, in order to grow overall revenue of the business unit.

## Graduate Research Assistant/Teaching Assistant Rensselaer Polytechnic Institute

8/5/2010 - 8/10/2016

FINRA Registration FINRA Registration

110 8th Street, Troy, NY

- Formulated and implemented numerical methods such as non-reflective boundary condition for in-house scientific computation software; developed tools to automate preprocessing workflow; analyzed dynamics and mechanism of the phonation process and quantified its energy utilization based on finite element computational simulations.
- Modeled optimization cases on multi-consumer-category utility pricing and interdependent project scheduling; designed programming and user interface for interactive optimal decision making analysis.
- Tutored undergraduate students on engineering and physics courses; held workshops on various topics including finite element method and coding.

## **SKILLS**

Extensive coding experience in Slang, C++, Fortran, Matlab.

In-depth knowledge of systematic trading strategies, finite element method, optimizations. Parallel computing, version control, object-oriented programming, dataflow programming.

LICENSES AND	
CERTIFICATION	

General Securities Representative Examination	Series 7
Uniform Securities Agent State Law Examination	Series 63

**EDUCATION** 

Ph.D., Mechanical Engineering	4.0/4.0	Rensselaer Polytechnic Institute	Aug. 2016
M.Sc., Applied Mathematics	4.0/4.0	Rensselaer Polytechnic Institute	Dec. 2015
B.Sc., Mechanical Engineering	3.83/4.3	Univ. of Science and Technology of China	June 2010

AWARDS AND HONORS

Second-place team	MOPTA Optimization Modeling Competition	2015
Honorable Mention team	MOPTA Optimization Modeling Competition	2014
Graduation with Great Honor	University of Science and Technology of China	2010
Excellent Student Scholarship(s)	University of Science and Technology of China	2008, 2009
National Scholarship	Ministry of Education of China	2007

## **PUBLICATIONS**

J. Yang, F. Yu, M. H. Krane, and L. T. Zhang, "The Perfectly Matched Layer absorbing boundary for fluid-structure interactions using the Immersed Finite Element Method," *J. Fluid. Struct.*, 2018.

J. Yang, X. Wang, M. H. Krane, and L. T. Zhang, "Fully-coupled aeroelastic simulation with fluid compressibility – For application to vocal fold vibration," *Comput. Meth. Appl. Mech. Engr.*, 2017.

L. T. Zhang and J. Yang, "Evaluation of aerodynamic characteristics of a coupled fluid-structure system using generalized Bernoulli's principle: An application to vocal folds vibration," *J. Coupled Syst. Multiscale Dyn.*, 2016.