

PROFESSIONAL PROFILE Lead quantitative strategist with broad expertise and rich experience in systematic/quantitative strategies research, modeling, and systems design and development. Demonstrated and praised ability to make impact with strong technical skills, innovative ideas, and leadership.

- Extensive experience with systematic strategies research in commodities and other asset classes
- Designed and implemented robust, scalable, and efficient systems for research and production
- Managing projects and initiatives, coaching and managing juniors and interns

EXPERIENCE *Vice President - Quantitative Strategist* *Aug 2021 -*
Goldman Sachs - Asset Management *200 West Street, New York, NY*

- Managing and leading designs of new platform for strategies research, backtest, and production purposes, allowing for scalability, transparency, and efficiency in research and production.
- Developing and backtesting systematic strategies, using statistical, quantitative, and econometric techniques to improve portfolio performance.
- Leading projects on strategies and systems implementation in Python, as well as on interfacing and dependencies with legacy systems and processes in Slang/SecDb, with the goal of wider application of Python and open-source packages.
- Applying statistical analysis and modeling in order to design and test performance of proposed new strategies, including testing of robustness of performance, distribution of losses and gains, and risk analysis of such strategies.
- Managed designs of new portfolio construction workflow infrastructure, covering systems spanning data quality, strategy signals and models, order generation, and analytics processes.
- Developed an ecosystem of infrastructure and toolsets to automate and streamline processes and operations, significantly reduced time spent by colleagues and systems on many routine processes (10x more efficient on average), in some cases from hours down to minutes, and ensuring better accuracies.

Vice President - Trading Strategist *Oct 2016 - Aug 2021*
Goldman Sachs - Systematic Trading Strategies *200 West Street, New York, NY*

- Developed and backtested systematic strategies, with primary focus in commodities.
- Led projects on front-to-back automation systems for data quality, internal setup, due diligence checks, and documentations generation for systematic strategies, improving workflow efficiency and documentation accuracy; as a result, automated and streamlined strategy setup and daily operations processes.
- Maintained front-office modeling and risk systems to capture market risks of book positions.
- Performed quantitative analyses on portfolio risk-reward and stress scenarios.
- Collaborated across different teams to create a web-interfaced backtesting and portfolio rebalancing environment, extended selected 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 analytics and reporting for internal and external users, for analyzing performance of systematic strategies as well as market risks and exposure.

SKILLS In-depth knowledge of trading and investment strategies, financial markets, optimizations. Currently coding in Python and Slang; past experience in C++ and Matlab. Systems design, object-oriented programming, parallel computing, version control.

LICENSES AND CERTIFICATIONS *General Securities Representative Examination* *Series 7* *FINRA Registration*
Uniform Securities Agent State Law Examination *Series 63* *FINRA Registration*

EDUCATION *Ph.D., Mechanical Engineering* *4.0/4.0* *Rensselaer Polytechnic Institute* *2016*
 Modeling/implementation of numerical solution of PDE, simulation of physics, analysis of dynamics and energy flow
M.Sc., Applied Mathematics *4.0/4.0* *Rensselaer Polytechnic Institute* *2015*
 Second-place team (2015), Honorable Mention team (2014): *MOPTA Optimization Modeling Competition*
B.Sc., Mechanical Engineering *3.83/4.3* *University of Science and Technology of China* *2010*
 Graduation with Great Honor (2010), Excellent Student Scholarship(2009, 2008): *Univ. Science & Technology of China*
 National Scholarship (2007): *Ministry of Education of China*

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.