August 30, 2021

Songhao Li

550 Memorial Drive

Cambridge, MA 02139

Dear D.E. Shaw Group:

I am a Master of Finance student at the MIT Sloan School of Management writing to apply for your Quantitative Analyst. I had the chance to find this career opportunity at MIT career central, and I am impressed by the exposure to financial data and strategy formulation; I feel it would be a great position to learn. I offer a proven track record of skills that would allow me to make a positive impact on your team:

* **Quantitative research capacities:** past experiences in multiple quantitative research projects from different perspectives (hedge fund, quant asset manager, sell-side securities) build up my strong research capabilities and insight. At PanAgora, working on two research projects within a fast-paced 10-week internship, I successfully constructed robust and risk-neutral investment factors with significant alpha returns in both projects.
* **Coding and programming proficiency:** Proficient in Python and C++ (and other software/languages like SQL/MATLAB/R/STATA), I can efficiently quantify financial problems and express in a coding environment and code up object-oriented programs tools to manage big projects. At PanAgora I designed efficient web scraping programs and cleaned large datasets, before analyzing them and constructing alpha strategies.
* **Analytical, mathematical, and statistical skills:** Finishing demanding mathematical and statistical courses at CUHK, Oxford, and MIT, my strong academic background has laid me a solid analytical foundation. Applying some of the most complex reinforcement learning algorithms to build investment strategies at Huatai Securities in China, I showcased my capacities to analyze and apply sophisticated machine learning models (reinforcement learning & genetic engineering) quickly and skillfully
* **Communication skills and teamwork spirit:** I feel comfortable with professional communications, and I believe positive interactions add value toward both personal and collective achievement. Last winter I led an MIT research team and worked with a Fidelity financial solutions team; at PanAgora I was engaged in a diverse collaboration environment and constantly work with research teams, IT teams, and data vendors.

I am confident that I would be a good fit for your team because I could combine my quantitative, analytical, and interpersonal skills with passion for quantitative research. I would humbly appreciate an interview to further discuss my passion and qualifications. Thank you for considering my application, and I look forward to hearing from you soon.

Sincerely,

Songhao Li