

September 10, 2020  
Songhao Li  
550 Memorial Drive  
Cambridge, MA 02139

Dear Arrowstreet Capital:

I am a Master of Finance student at the MIT Sloan School of Management writing to apply for your Research Quantitative Developer Intern. I am enthusiastic to solving complex finance problems with my quantitative, analytical, and collaborative skills. I offer a proven track record of these skills that would allow me to make a positive impact on your team:

- **Strong quantitative and coding capacities:** Proficient in Python and C++, I am aware of how to effectively quantify financial problems and express in coding environment. Working with the research institute of a top security group of China, I implemented several machine learning algorithms to discover factors in the futures market along with senior professionals. I also cleansed large raw financial data sets for back-testing, and wrote programs (in OOP paradigm) to validate trading strategies following rigorous statistical principles.
- **Superior analytical, mathematical, and statistical skills.** My strong academic background has laid a solid foundation and allows me to apply sophisticated models in fast-paced financial industry. While interning with a medium-sized hedge fund, I reported to my supervisor with back-tested CTA strategies from top journals on a weekly basis; starting with zero knowledge, I analyzed the whole family of reinforcement learning algorithms in two weeks.
- **Impactful interpersonal skills:** I appreciate the power of positive interactions with teammates and clients. Leading an internship team from different background to develop reinforcement learning research, I improved teamwork morale and efficiency by clear specialization and scheduling. By investing time to understand clients' concerns and investment logic, I led the team to construct a promising and convincing framework that became popular both within the company and among clients.

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 trading. 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