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Welling  
DA16 2AP  
United Kingdom

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Vattenfall AB

## Application for Quantitative Researcher (Algorithmic Trading Analyst)

Dear Madam and Sir,

I am interested in this position as a quantitative researcher in your team, and believe that myself is a good fit to the role.

I have been working as a quantitative researcher in algorithmic execution since 2013, covering most perspectives of algorithmic trading, e.g. transaction cost analysis, execution strategies and smart order router. In recent years, I have coordinated market data, IT and quantitative team, building an Alpha-enhanced execution framework in Advanced Execution Services (AES) Credit Suisse. The primary result of A/B test by Portfolio Trading desk shows that, the short-term alpha signal (proposed by me) improves the VWAP algo performance against the market VWAP by approximately 20%.

This is just the latest achievement in my career. Indeed, most of my researches have been implemented and used in products in variant places. Personally, I believe the following factors are keys for making things happen,

**Clear research objective** I always spent a lot of time on identifying and clarifying the practical target with stakeholders before starting my research;

**Simple solution** Although I typically tried out many methods in my research, I would carefully balance the complexity and performance when proposing a solution, preferring a simple solution than a complex one unless the performance was substantially different;

**Speaking other's language** With a computer science education background, I could pick up a new IT technology quickly when it was suggested by developers, and then translated my model to a development specification with the new technology in consideration;

**Honest to stakeholders** The new algo might not work as expected at the beginning. When it's the case, I would raise the flag to the traders as soon as possible, so we could investigate the negative outlier together, identify the issue and resolve it.

I sincerely look forward to talking to you on my experience and my thoughts on execution strategies. Hopefully, I could get the chance to work with you and make more great things happen.

Yours Sincerely,

Dr. Huang, Ruihong