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Shanghai

Shiming He

Algotrading, Quant, Machine-Learning, Software Architect

Shiming delivers innovative software solutions, driving success for clients from all kinds of industries in competitive environments. With almost two decades of experience, Shiming excels in developing statistical models, machine-learning predictors, financial information and trading systems, and conducting quantitative strategy research.

EDUCATION

BS, Computer Science
Staffordshire University / U.K.
2000 - 2004

SKILLS

- Communication
- Empathy
- Statistics
- Technical Analysis
- Financial Markets
- Python
  - numpy with numba
  - scipy
  - scikit-learn
  - lightgbm
  - arch
  - matplotlib
- PyTorch
- React
- Docker
- Linux Servers

RECENT EXPERIENCE

Lead Developer, Quant, Account Manager
4NCapital, LLC   *Sep 2023 - Now*

- Develop and maintain discretionary internal trading systems that connects to Interactive Brokers institutional API and perform a variety of operations including screening and strategy automation.
- Develop and maintain bond ladder automation software.
- Conduct quantitative strategy research and strategy automation.
- Goal-oriented automation in customer account management.

Independent Project Developer
OS-Climate Foundation, on behalf of Climate Risk Research Foundation   *Nov 2022 - Nov 2023*

- Develop computer-vision based parser for complex layout PDF understanding and data extraction.
- Support the data-extraction team in visualizing and evaluating machine-learning model and rule-based model extraction results.
- Support the data-commons team and integrate solutions.

SELECT WORK EXPERIENCE

Lead Developer
DAC Management LLC, through Qlytics / Ampliforce
July 2018 - Dec 2020

- Develop and maintain a complex data-scraping project to provide real-time China's real-estate pricing data, among other economic metrics to clients.
- Technical analysis of economic metric data.
- Leader of a team of 3

Lead Developer, Data Scientist
Qlytics, LLC / Ampliforce, LLC

March 2018 - Jan 2020

- Develop and maintain a PDF document data extraction system that uses machine-learning models to perform KPI extraction, in English, Japanese, and Chinese.
- Develop and maintain client-oriented computer-vision projects, including hand-writing recognition, scanned/photo table recognition, stamp identification, OCR.
- Develop and maintain client-oriented open-source software based speech recognition software.
- Leader of a team of 5.
- Running customer presentations and training sessions.

Freelancing Experience

March 2012 - Now

- TicketMaster's dynamic pricing system prototyping
- Nathan Latka's the Top Inbox
- Thunderpenny's Facebook app
- NextSwipe creditcard transaction fraud detection
- Crypto trading systems and strategies
- Interactive Brokers API trading systems and strategies implementation

Big Data Development Manager
Shanghai ComRatings Ltd.   *Jul 2011 - Feb 2013*

- Created and maintained a web traffic based user profiler, via more than 10 linear classification models.
- Created and maintained an image-based product search engine.
- Leader of a team of 10.

Language Model and Machine Learning Researcher
Microsoft China.   *Sep 2009 - Dec 2010*

- Implementing paper algorithms for next word prediction in Chinese input method.
- Improving code parallelization and memory footprint

THOUGHTS

The universe is a chain of chaotic, volatile chemical reactions, a symphony of randomness that underpins every aspect of our lives. It resonates across ethnicities and cultures who share common concepts of luck, fortune, karma, religion and deities. Concepts that reminds us of the randomness in this world, which leads to significantly diverged paths. The smartest minds, who we label as Oracle and Prophet, have crystal balls to predict the future.

Statistics is the GPS that helps us navigate in this randomness. Statistics is what gives us the God's view of a chain of unpredictable future events. Striving strategically means to reach that high N-th percentile.

I'm diligent, knowledgeable, and honest. The very fact that you read this far proved that statistics worked in my favor. And I believe that I can contribute greatly to your prosperity.

REFERENCE

Robert Khan of 4NCapital robert@4ncapital.com
Heather Ackenhusen of OS-Climate hackenhusen@os-climate.org
Brendan Reilly of Climate Risk Research Foundation breilly@climateriskresearch.org
Nathan Latka nathanlatka@gmail.com