



# Yanyi Huang

QUANTITATIVE DEVELOPER / CQF CANDIDATE

CQF Candidate, Expected July 2026

Quantitative developer and CQF Candidate (Expected July 2026) with strong background in Python, big data analytics, and financial risk analysis. Over 10 years of experience in designing and implementing large-scale data processing systems, ETL pipelines, and machine learning models. Combines Master's in Computer Science with Bachelor's in Mathematics to deliver data-driven solutions for financial and insurance domains. Proficient in data cleaning, real-time/offline data analysis, and generating actionable insights from complex datasets.

## CONTACT

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📍 Hong Kong, China

## LANGUAGES

### Mandarin

Native

### Cantonese

Native

### English

Professional Working

## PROFESSIONAL EXPERIENCE

### HKU, HONG KONG

#### IT Technician

Aug 2025 — Present

- Develop internal software systems including CMS based on Drupal and PHP for content management
- Build full-stack applications using Next.js, Node.js, and Nest.js for internal business processes
- Design and implement RBAC (Role-Based Access Control) permission system for secure resource management

### FWD, HONG KONG

#### Full Stack Engineer & Tech Lead

Oct 2022 — Feb 2025

- Led data analysis initiatives for lead generation, resulting in 25% increase in qualified leads through customer segmentation
- Built Python-based data pipelines for processing insurance claims and policy data on AWS
- Implemented analytics dashboards for tracking sales performance and risk metrics

## SKILLS

- ✓ Python / Pandas / NumPy / SciPy
- ✓ Data Analysis / ETL / Data Pipeline
- ✓ Machine Learning / PyTorch / YOLO
- ✓ Big Data: HBase / Hive / Kafka / JStorm
- ✓ Database: MySQL / MongoDB / Redis
- ✓ Monitoring: InfluxDB / Grafana
- ✓ Cloud: AWS / Docker / CI/CD / Jenkins / Spinnaker
- ✓ Financial: Backtesting / Trading Systems / Risk Analysis
- ✓ Web: Node.js / Nest.js / React
- ✓ Agile / Scrum

## GLP, SHANGHAI

### Full Stack Software Engineer & Lead

Jun 2021 — Aug 2022

- Developed computer vision algorithms using YOLOv5 and PyTorch for object detection from video streams
- Led data cleaning and preprocessing initiatives: identified dirty data, performed re-labeling and retraining to improve model accuracy
- Built data analysis pipelines to process and validate large-scale image datasets before feeding to ML models
- Implemented data quality monitoring systems to detect anomalies and ensure training data integrity
- Solar PV & Energy Storage Optimization Project: Collected and analyzed multi-source data including weather patterns, historical electricity peak demand, and sunshine duration; leveraged NumPy and SciPy for statistical analysis and algorithmic curve fitting to model energy generation and consumption patterns, delivering optimal energy storage solutions that maximized ROI and grid stability

## AUTODESK, SHANGHAI

### Senior Software Engineer II

Jun 2018 — Jan 2021

- Managed large-scale CI/CD pipeline migration from TeamCity to Jenkins + Spinnaker on AWS cloud
- Designed and maintained complex build scripts using PowerShell, Ruby, Shell, and Python for automated deployments
- Configured cloud infrastructure using Docker and AWS services for high availability and cost optimization
- Implemented monitoring and alerting systems for pipeline health and deployment success tracking

## ZHONGAN ONLINE P&C INSURANCE, SHANGHAI

### Senior Software Engineer & Leader

Mar 2017 — Apr 2018

- Built end-to-end data pipeline: event tracking → data analysis → database storage → report generation for insurance analytics
- Implemented real-time and offline data processing using JStorm (Alibaba's stream processing) and DataX for data synchronization
- Designed and maintained large-scale data storage systems using HBase and Hive for petabyte-scale insurance data
- Developed automated ETL workflows to clean, transform, and aggregate data from Kafka streams to final analytics reports

## **DATAYES, SHANGHAI**

### **Software Developer**

Aug 2016 — Feb 2017

- Developed Python-based backtesting platform for quantitative trading strategies with historical market data
- Built investment portfolio management product for tracking and optimizing asset allocation
- Created research and development platform for financial analysts to design and test trading strategies
- Implemented real-time market data retrieval and strategy execution systems using Python

## **SHANGHAI LUJIAZUI INTERNATIONAL FINANCIAL ASSET EXCHANGE**

### **Software Developer**

Jun 2015 — May 2016

- Developed microservices architecture with 20+ services
- Implemented Git workflow for managing quick and emergency releases
- Collaborated with Mobile Team using jsbridge for hybrid applications

## **DELL, SHANGHAI**

### **Software Analyst**

Aug 2012 — Jun 2014

- Developed PHP applications using JavaScript, CMS, MySQL, and Drupal
- Implemented digital marketing solutions using TMS and Salesforce
- Applied A/B testing to optimize website based on customer preferences

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## **EDUCATION**

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### **MASTER IN COMPUTER SCIENCE**

**Fudan University, Shanghai**

Sep 2008 — Jan 2012

### **BACHELOR IN MATHEMATICS**

**Shandong Technology and Business University**

Sep 2004 — Jul 2008

### **CQF (CERTIFICATE IN QUANTITATIVE FINANCE) CANDIDATE**

**Expected Completion: July 2026**

# CERTIFICATIONS



## Neural Networks and Deep Learning

DeepLearning.AI / Coursera (Andrew Ng)

Completed



## Site Reliability Engineering: Measuring and Managing Reliability

Google Cloud / Coursera

Oct 31, 2019