# Lin Di

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## EXPECTED SALARY

Expected Salary: HKD 20,000 – 35,000 monthly
Right to work: IANG Visa (Jul 2024 – Oct 2026)

Past Salary: RMB 21,000 monthly (2022)

## SUMMARY


- Four years of working experience in backend development, proficient in popular Java frameworks and middleware, having practical experience in microservice architecture.
- Postgraduate direction is machine learning, focusing on the development, optimization and practical application of machine learning models.


## EDUCATION

**City University of Hong Kong** — Aug 2022 - Jun 2024
*MSC in Computer Science* — *Hong Kong*

**Wuhan University** — Sept 2014 - Jun 2018
*B.Eng. in Information Security* — *Wuhan*
*Bachelor of Economics (Minor)*

## SKILLS

- ***Java:*** *Proficient in Java main features, concurrent and mainstream frameworks, with rich application and optimization experience.*
- ***Python:*** *Proficient in using Python for data analysis, machine learning model tuning and automated scripting.*
- ***Development tools/frameworks:*** *Proficient in using popular IDEs and development tools; proficient in Spring MVC, Spring Boot, MyBatis and other popular Java frameworks, familiar with deep learning frameworks.*
- ***Database:*** *Proficient in MySQL performance tuning tips. Familiar with Redis and MongoDB, with rich practical experience.*
- ***Distributed:*** *Having practical experience in microservice architecture.*
- ***DevOps:*** *Proficient in Jenkins and CI/CD pipelines. Rich experience in virtual machine and container deployment.*
- ***Big data:*** *Rich experience in batch processing of large-scale data using Hadoop and Spark.*
- ***Front-end:*** *Experience in front-end development under the jQuery framework.*

## WORK EXPERIENCE

**China Merchants Financial Technology Co., Ltd.** — Jul 2018 - Jun 2022

**Backend development engineer** — Shenzhen

- ***Key platform development:*** *(1) Responsible for the front-end and back-end development of multiple key platforms, including* ***digital financial service platform*** *(DFSP),* ***CM Worklink*** *, group's legal and compliance system, etc. (2) Responsible for technology selection of the DFSP project.*

- ***Architecture design:*** *(1) In order to decouple and cope with potential high concurrency requirements, designed the microservice architecture of DFSP. (2) The communication of multiple microservices (user management microservice, report management microservice, risk calculation microservice, etc.) based on RESTful API and Kafka. (3) Used Eureka to build the microservice registration center, Spring Cloud Gateway for microservice requests routing, also provided Round-robin load balancing for microservice dual instances. (4) Determined the boundaries of microservices, gradually launching various microservices in multiple iterations. (5) Responsible for other architectural changes of DFSP, including file storage, firewall, gateway, etc.*

- ***Development framework:*** *(1) Responsible for building, maintaining, and optimizing project scaffolding, including multiple*

*data sources configuration, dependency management optimization, code generation optimization, testing framework optimization, etc. (2) Used Spring Cloud Config to build the configuration center of DFSP to uniformly manage configurations of all microservices.*

- ***High performance:*** *(1) Built a microservice performance monitoring framework, integrating Spring Boot Actuator, log monitoring and database performance monitoring. (2) For potential high-concurrency and large-data volume business scenarios (mainly multiple users submitting large amounts of report data, large amounts of indicator value calculation requests and concurrent query requests), using Kafka message queues, let risk calculation microservice asynchronously and concurrently processes risk calculation tasks.*

- ***Database:*** *(1) Optimized SQL and code of DFSP, significantly reducing the frequency of slow SQL and table locks. (2) Used Redis to cache user login information and session data of DFSP to avoid strong dependence on the company's NUC system, shorten the response time of user authentication and authorization to within 100ms. (3) Designed and implemented a phased migration of tens of millions of risk report data from MySQL to MongoDB.*

- ***DevOps:*** *(1) Worked with the company's operation team to jointly undertake the operation related work of DFSP, including application deployment and configuration management, log monitoring and troubleshooting, performance monitoring and optimization, capacity planning and resource management, and formulation of backup and recovery strategies. (2) Responsible for the containerization migration of applications deployed on the virtual machines of DFSP.*

- ***Team Collaboration:*** *(1) Formulated team coding standards, configure static code scanning, and organize code reviews regularly to ensure code quality and team collaboration efficiency. (2) The DFSP project was listed as a key project of the company, and my personal annual performance was also among the top in the department.*

## Patents

Liao Jing, Li Xun, Wei Rizhen, **Lin Di**, Zhang Jing, Xie Zhancheng, Zhong Guochao, (2024-03-01). **Data association and inspection method and device, electronic equipment and storage medium.** 🔗

## Project Experience

**Lin Di**, Qu Zhiyan, (2024). **Improved PointNet Model for 3D Object Classification** 🔗

- *Studied papers on various 3D point cloud classification models such as PointNet, PointNet++, and MLVCNN, and finally considered optimizing PointNet to realize a 3D object classification model based on improved PointNet.*
- *Tried multiple optimization ideas, including adding Squeeze-and-Excitation block (SE Block), adding batch layers and designing a deeper convolution network architecture, successfully improved the versatility and accuracy of the model. The test accuracy of the optimal model PointNet_SE_BN on the ModelNet40 dataset is 0.885332, which is a certain improvement over the baseline PointNet of 0.881280.*

Sun Zhen, **Lin Di**, Guo Peiyuan, (2022). **A DenseNet-Based Model for Bird Classification** 🔗

- *After referring to papers of ResNet and DenseNet, we finally chose to implement a bird classification model based on DenseNet, which includes multiple dense blocks, transition layers, and pooling layers.*
- *Tried various optimization ideas such as data enhancement, ImageNet pre-training, DenseNet architecture optimization, and adding attention enhancement modules, and successfully improved the test accuracy to 0.862, among which ImageNet pre-training contributed the most.*
- *This model is significantly improved compared to the baseline ResNet model.*

## Honors And Awards

Wuhan University: 2017 Class C Scholarship (Minor, top 15% students), 2016 Class A Scholarship (Minor, top 5% students), 2016 Excellent Student (top 25% students), 2016 Class C Scholarship (top 25% students)