# Shao Xiaoping

Male | Age: 40 | Phone: 13816756087 | Email: xaopng.shao@gmail.com 16 years of experience | Master's Degree | Job Objective: Architect/Technical Manager | Preferred Location: Shanghai

# Summary

- 8 years of experience in cloud computing, with a deep understanding of distributed computing.
   Skilled in cloud services, storage, databases, messaging middleware, and caching with extensive experience in solutions like Flink, Kafka, Node.js, RocketMQ, Spring Boot, MySQL, HBase, Kubernetes, Docker, etc. Familiar with multiple cloud service providers including Azure, Alibaba Cloud, Huawei Cloud, and Google Cloud.
- 8 years of experience in computer graphics, with extensive experience in CAD software development. Understands rendering scene graphs, shaders, and OpenGL topics. Experienced in direct modeling systems in CAD, familiar with key concepts and topology. Also has about 2 years of experience in image processing, mainly working at the rendering layer framework, with extensive experience in optimizing and improving performance in terms of local management of memory or CPU/time.
- Proficient in multiple programming languages, including over 5 years in C++, over 4 years in Java and C#, over 3 years in JavaScript, about 1 year in Rust, about 0.5 years in Dart, and some experience in Shell and Python. Has strong rapid learning capabilities and can integrate knowledge across fields.
- Rich experience in building systems from scratch. Involved in architectural planning, database and frontend/backend technology selection, environment setup, cost estimation and control, and final deployment. Experienced in leading small teams and seeking leadership positions in technology.
   Known for enjoying challenges and often viewed as a key member of the team.

# Work Experience

Oqton (Shanghai), Principle Software Engineer, 2022/04-Present

# Primary Responsibilities:

- Participated in the R&D of the company's core product, the MOS (Manufacturing Operating System).
  - Mainly responsible for the IoT Pipeline and Alerts system.
  - Participated in the development of the MES (Manufacturing Execution System) and the company's new generation UI system (Page Builder).
- As a full-stack engineer capable of working in frontend, backend, and DevOps, is the most broadly involved engineer in Shanghai.
- As a senior expert, involved in company recruitment, actively reviewed code and solutions, and produced design plans. Actively worked to improve team efficiency.

#### Achievements:

- Responsible for the Cost Reduce project in the IoT, optimizing resource use, significantly saving costs. Approximately 50% reduction in a single cluster.
- Significantly improved and stabilized the IoT Pipeline, greatly reducing the fault rate.

• Timely completed important challenging features, such as the Sensor Formula in the IoT system and the universal data modification tracking feature in the MES system.

#### Technical Keywords:

 React/Redux, TypeScript, ProtoBuf, Temporal, Flink, Kafka, Apache Kafka Stream, Node.js, ActiveMQ, Elasticsearch, Python

# Entrepreneurship, Partner, 2021/05-2022/04

#### Primary Responsibilities:

- Released an Al-based US stock analysis system. Daily, our website would publish system-calculated indicators and statistical data, and various robots would recommend stocks based on the previous day's market performance, targeting a next-day price increase of over 1%. Our robots achieved an 80% success rate in backtests and actual outcomes.
- As the sole engineer, built everything from scratch, including the Flutter frontend, Rocket backend, subscription payments implementation (Stripe), DevOps deployment, and CI/CD construction.

#### Achievements:

- Deployed our stock analysis program on Google Cloud, gaining about 40 annual paying users.
- Also released a WeChat mini-program for book excerpts, facilitating book annotations with voice input support.

### Technical Keywords:

 Rust (Rocket), Flutter, MySQL, Google Cloud, Google Firebase, Stripe, WeChat SDK, OTS, OSS, Alibaba Cloud

# Glodon Company Limited, Technical Expert, 2019.1-2021/5

### Primary Responsibilities:

- Led the backend team (5 people) under a new design for the collaborative design data platform, building it from nothing to launch. The platform supported collaborative multi-disciplinary BIM data for design, structure, and MEP.
- Participated in the company's BIM data standards creation, providing a basis for multi-disciplinary data collaboration.
- As a pioneer, participated in the construction of the desktop SDK for the collaborative data platform and successfully integrated it into the company's desktop design software.

#### Achievements:

- Launched the BIM data collaboration platform (https://gteam.glodon.com/) from scratch, supporting a national project requirement of 1000 concurrent users.
- An invention patent: Structured management method, device, computer equipment, and storage medium for BIM data. (CN202110074818.8)

## Technical Keywords:

 K8S, SpringBoot, HBase/OTS, MySQL, OSS, Redis, RabbitMQ, Node.js, Three.js, C++, Alibaba Cloud/Huawei Cloud

# Microsoft (China), Senior Software Engineer, 2015.12-2019/1

#### Primary Responsibilities:

Responsible for the data governance part of the Azure CDN service, including traffic billing data, log
data, system monitoring data, and domain monitoring data. Managed the entire lifecycle of the data
from collection, processing, storage to usage by other systems. This data is crucial for the efficient
operation of the CDN, such as intelligent scheduling and peak cutting.

#### Achievements:

- Processed approximately 2T of log data daily, requiring synchronization of usage data at different granularities.
- Peak bandwidth was about 1-2T, distributed to about 5 CDN providers. We invented and developed "Intelligent CDN."

## Technical Keywords:

• C# (MVC.net), Azure TableStore, Azure Blob, Azure Message, ElasticSearch, coreDNS

# Autodesk (China), (Senior) Software Engineer, 2008.1-2015/12

## Primary Responsibilities:

- Participated from scratch in the release of Inventor Publisher software, which creates assembly
  documents from 3D design models, responsible for the development of Annotations. Also
  participated in keyframe animation development.
- Deeply involved in the development of Inventor Fusion, responsible for many important modeling features such as Mirror/Pattern, Primitives, Extend, Patch, etc. Understands direct modeling and the core modeling engine.
- Participated in the company's new mobile project, SketchBook Android development, responsible for the rendering part, innovatively used Tile-based refresh to improve drawing performance, supporting large canvases.
- Participated in the development of multiple versions of PixIr, including Android and cross-platform projects, mainly responsible for the rendering part. Used GL Rendering to handle real-time camera image effects and offline saving.

#### Achievements:

- Built and released Publisher and Fusion from scratch, going through TP, Alpha, Beta, and production cycles. My work was highly praised by American leadership.
- SketchBook gained the first 1 million users, and PixIr gained the first 10 million users. My work significantly improved software performance.

#### Technical Keywords:

• C#, C++, ASM/ACIS, Graphics (Rendering/Modeling), Java, Android, Image Processing, Cross-platform Development

# **Educational Background**

- Master's, Computer Science, Zhejiang University, Hangzhou, 2005-2007
- Bachelor's, Computer Science, Hangzhou Dianzi University, Hangzhou, 2001-2005

# Certifications

- Computer and Software Technical Capability Certificate, 2004
- CET6: 550, Oral: C