Personal Information

- Name: Pan Haitao
- Phone: +86 19286470192
- Location: Shanghai, China
- Email: manbuzhe2008@gmail.com
- Website: http://www.svc.plus
- LinkedIn: www.linkedin.com/in/haitaopan
- Languages: Chinese (Native), English (Conversational)

Key Experience and Expertise

- 13+ years of IT experience (Manufacturing / Finance / Internet)
- Tech Stack: Linux, Python, Ansible, Docker, Kubernetes, IaC (Terraform/Ansible), DevOps toolchains
- Architecture Design: Distributed systems, hybrid cloud, containerization, microservices, CI/CD pipelines, multi-cloud management
- Observability & Performance: NPM & APM, eBPF, unified metrics/logs/traces, performance tuning & stability optimization
- Automation & Platformization: Configuration management, automated operations, platform-based DevOps solutions
- AI-Driven Operations: AI Agent, RAG, intelligent operations and knowledge automation
- Project Delivery & Collaboration: Customer support, cross-team coordination, issue resolution and closure

Education Background

Time Range	Highest Degree	School	Major
2006.9 ~ 2010.6	Bachelor's	Changchun University of Technology	Electrical Engineering and Automation

JOB HISTORY

Duration	Company	Job Title
2024.11 ~ 2025.9	Deepflow Technology Co., Ltd.	Senior Technical Support Engineer

Duration	Company	Job Title
2024.1 ~ 2024.5	Tesla (Shanghai) Co., Ltd.	Site Reliability Engineer
2022.3 ~ 2023.10	Eccom Network System Co., Ltd.	Senior Cloud Solution Architect
2021.12 ~ 2022.1	Jiangshu BoCloud Technology Co., Ltd.	Senior Solution Architect
2020.7 ~ 2021.11	UCloud Technology Co., Ltd.	Senior Solution Architect
2018.5 ~ 2020.6	Alauda Cloud Technology Co., Ltd.	Delivery Engineer
2015.5 ~ 2018.4	Tongxin Software Co., Ltd.	Software Engineer
2013.11 ~ 2015.4	KnowSec Technology Co., Ltd.	Operations Engineer
2013.5 ~ 2013.10	Inspur Electronic Information Co., Ltd.	System Software Engineer
2011.5 ~ 2013.4	China Standard Software Co., Ltd.	Software Engineer

Project Summary

Time Range	Client	Project Name	Role	Tech Stack
2024.11-2025.9	Deepflow Technology	Deepflow Customer Projects	Senior Technical Support Engineer	Linux / Kubernetes / NPM & APM / eBPF / Hybrid Cloud
2024.01-2024.04	Tesla (Shanghai)	Internal Project at Tesla	SRE (Site Reliability Engineer)	GitHub Actions, GitOps (ArgoCD), Ansible, Helm, Jenkins / HashiCorp / Linux Server
2022.06-2023.09	Roche	Roche MSP Services	Solution Architect	Cloud Platform Automation IAC (Terraform), GitLab CI, GitOps (FluxCD), Datadog, Linux Server

Time Range	Client	Project Name	Role	Tech Stack
2020.07-2021.11	UCloud	UCloud Client Projects	Solution Architect	Cloud Migration, Kubernetes, Hybrid Cloud, Distributed Storage, Network Security, Logging & Monitoring, CI/CD
2019.06-2020.06	Everbright Bank	Everbright Bank CPaaS Project	On-site Implementation Engineer	Alauda Container Platform/VMware CNI NSX-T/DevOps/ES/Prometheus
2015.5-2018.8	Tongxin Software Co., Ltd.	Deepin Server Product Development	Software Engineer	Linux (Debian/CentOS), Shell Scripting, Docker, Jenkins
2013.11-2015.4	KnowSec Technology Co., Ltd.	Infrastructure and Operations Management	Operations Engineer	Linux, Shell, Python, Saltstack, Nginx, Nagios, CDN Technology
2013.5-2013.10	Inspur Electronic Information Co., Ltd.	KUX-OS Server Version Maintenance	System Software Engineer	Linux, Apache, Bash Scripting, Monitoring Tools
2011.05-2013.04	China Standard Software Co., Ltd.	Linux System Porting and RPM Build Automation	Software Engineer	Linux, RPM Packaging, Koji Build System, Shell Scripting

PROJECT/ CONSULTANCY SERVICES EXPERIENCE

Personal Open-Source Projects

- **XControl**
  Web-based control panel integrating **XConfig, XCloudFlow, XScopeHub, Xstream**, and other modules. Provides a unified management interface for DevOps, observability, and AI Agent workflows.

- **XConfig** (GitHub)
  Flexible DevOps orchestrator with Rust Agent, enabling modular deployment and configuration automation.

- **XCloudFlow** (GitHub)
  Multi-cloud management and automation framework for continuous infrastructure setup and cross-cloud orchestration.

- **XScopeHub** (GitHub)
  Observability suite integrating **Vector / OpenTelemetry / OpenObserve / PostgreSQL (Timescale/pgvector)** for nearline ETL, IaC/Ansible topology, and active call graph analytics.

- **Xstream** (GitHub)
  Dart-based GUI client for cross-border service acceleration and connection management, enhancing reliability and speed
- **Navi** (GitHub) A desktop AI assistant designed to guide tasks and boost productivity, helping users accomplish work more efficiently.

Focus Areas
- Web-based orchestration & observability platform (XControl).
- Cloud-native observability (metrics, logs, traces) and AI Agent + RAG architectures.
- Multi-cloud automation, DevOps toolchains, and hybrid infrastructure optimization.

Project 1: DeepFlow North-South Traffic Collection System Maintenance –China Telecom Finance

Duration: Nov 2024 –Jul 2025
Company: China Telecom Finance
Role: Network Observability Engineer
Tech Stack: DeepFlow, Linux, Pcap, Flow Logs, Performance Optimization, System Migration, Information Security Compliance

Project Description
Supported the performance and stability assurance of the DeepFlow north-south traffic collectors, ensuring reliability under high-concurrency scenarios, and facilitated hardware upgrades and compliance-driven infrastructure transformation.

Responsibilities
- Tuned collector performance and maintained stability, resolving bottlenecks and packet loss issues under heavy traffic.
- Assisted in hardware capacity planning and optimized DF Server stor-

age/query performance to support migration and scaling.
- Drove issue tracking and closure across three project phases, establishing a standardized maintenance and feedback mechanism.
- Delivered fault reports, upgrade plans, optimization strategies, and implementation documents to ensure knowledge transfer.

Achievements
- Resolved multiple performance bottlenecks, improving traffic collection and analysis stability.
- Completed DF Server performance optimization and scaling migration in the Nanjing region, enabling business expansion.
- Assisted in completing collector compliance-driven transformation, improving compatibility and regulatory adherence.

Project 2: AI Agent Proof-of-Concept –COSCO Shipping

Duration: Jul 2025 –Sep 2025
Company: COSCO Shipping
Role: AI Operations Support Engineer
Tech Stack: AI Agent, Docker, Kubernetes, CI/CD, Conversational Agent, QA Testing

Project Description
Contributed to the deployment and validation of an AI Agent proof-of-concept (POC), supporting model integration, containerized environment setup, and conversational workflow testing to assist the IT department's technology evaluation.

Responsibilities
- Built the POC environment, enabling model integration, containerization, and CI/CD workflows.
- Collaborated with R&D to test conversational Agent workflows, including task decomposition, tool invocation, and knowledge base Q&A.
- Designed and executed QA testing plans to validate response latency, accuracy, and system stability.
- Provided deployment documentation and test checklists to support client evaluation and decision-making.

Achievements
- Delivered successful AI Agent POC deployment and demo, gaining recognition from client leadership.
- Produced reusable environment setup and validation documents, accelerating internal technology adoption.

Project 3: Tesla Shanghai Internal Project

2024.01-2024.04 Tesla Shanghai Internal Project Site Reliability Engineering

- Company Name: Tesla
- Tech Stack: Linux, Kubernetes, GitHub Actions, GitOps (ArgoCD), Ansible, Helm, Jenkins
- Project Description: Worked on the DevOps implementation for Tesla Shanghai's internal IT service management system, focusing on improving efficiency and reliability.
- Responsibilities:
  1. Maintained the stability and reliability of the core production line by monitoring, adjusting, and maintaining edge industrial control hosts, virtual machines, and Kubernetes clusters to ensure high availability and performance.
  2. Responded swiftly to and resolved faults in production software and infrastructure to minimize production downtime. Implemented monitoring and alerting mechanisms to quickly detect and address issues.
  3. Collaborated with development teams to optimize deployment processes using GitHub Actions and GitOps with ArgoCD.
  4. Used Ansible, Helm, Jenkins, and GitHub Actions for regular software and system updates to enhance security and performance.
- Achievements:
  1. Enhanced the ITSM system CI/CD pipeline by redesigning the release process with GitHub Actions and ArgoCD.
  2. Developed Jenkins pipelines to automate edge software deployment, Ignition deployment, and upgrades, significantly improving deployment efficiency.

Project 4: Roche MSP service with AWS/AliCloud

2022.06-2023.09 Roche MSP service with AWS/AliCloud Solution Architect

- Company Name: Roche
- TechStack: AWS/Alicloud IAC Coding +Gitlab CI / GitOPS,FluxCD
- Project Description: Worked closely with public cloud customers, providing consulting and development services focused on cloud solutions and management.
- Responsibilities:
  1. Engaged with public cloud customers to deliver consulting and development services, leading project teams to provide continuous MSP support.
  2. Assisted team members in solving technical issues and advancing the implementation of public cloud solutions.
  3. Participated in the technical research and development of the company's internal public cloud solutions and supported technical train-

ing and management.

4. Created and updated technical documentation for public cloud scenarios.

- Achievements: Delivered ongoing consulting and development services for Roche Pharma China, including designing GitLab IAC automation solutions, implementing GitOps tools with FluxCD, and optimizing EKS IAC code.

Project 5: Ucloud cutomer project

2020.07-2021.11 Ucloud cutomer project Solution Architect

- Company Name: UCloud Technology Co., Ltd. (ucloud.cn)
- TechStack: Cloud migration, Kubernetes, hybrid cloud, distributed storage, network security, logging, monitoring, CI/CD.
- Project Description: Migrated multiple clients'infrastructures from other cloud platforms to UCloud and provided technical solutions to enhance their cloud operations.
- Responsibilities:
  1. Promoted UCloud's cloud products and solutions to Internet customers. Gathered customers' business needs and provided technical consulting services to support the sales team in achieving their goals.
  2. Developed technical plans, including white papers on hybrid cloud, distributed storage, containers, networks, and security
- Achievements:
  1. Successfully migrated 106 hosts and 3 Kubernetes (K8S) clusters from Tencent Cloud to UCloud
  2. Guided Walnut Education Company to deploy 10 K8S clusters (over 200 nodes) on UCloud, providing comprehensive logging, monitoring, and CICD services

Project 6: Everbright Bank PaaS project

2019.06-2020.06 Everbright Bank PaaS project On-site implementation engineer

- Company Name: Everbright Bank
- TechStack: Alauda Container Platform/Jenkins CI/Prometheus/ES
- Project Description: The container cloud PaaS platform of Everbright Bank is a platform with capabilities such as distributed microservice framework and service governance, distributed middleware, application life cycle management, intelligent operation and maintenance, platform management, application store and public application component ser-

vices, as well as integration and customization capabilities and basic capabilities of container cloud platform.
- Responsibility:
  1. Customer Collaboration and Requirements Gathering: Collaborated closely with the bank' s stakeholders to finalize business requirements. This involved deep analysis and understanding of existing implementations and designing new solutions tailored to their needs.
  2. Platform Upgrade and Development: Worked in a team to upgrade the Everbright Bank' s container platform from version 2.6 to 2.9. This included the development of new features, testing, and ensuring compatibility across different environments. Managed the successful upgrade of 8 Kubernetes clusters, enhancing the platform' s stability and performance.
  3. Operations and Maintenance: Provided continuous support for a year post-upgrade, ensuring smooth operations and maintenance of the platform. This included monitoring and troubleshooting using tools like Prometheus and Elasticsearch, ensuring minimal downtime and quick resolution of issues.
  4. DevOps and Automation: Leveraged Jenkins CI for continuous integration and delivery pipelines, automating the deployment process and reducing manual intervention. Enhanced the DevOps processes to streamline application deployment and management across multiple environments.
  5. Log and Monitoring Integration: Integrated comprehensive logging and monitoring solutions to track application performance, system health, and user activity. This involved setting up Elasticsearch (ES) and Prometheus for real-time monitoring and alerting.
  6. Customer Feedback and Product Improvement: Collected feedback and usage patterns from the customer, which were relayed to product managers and the research team for continuous improvement of the platform features and functionalities.
- Achievements:
  1. Successfully completed platform upgrades 6 times with 8 k8s clusters, for Everbright Bank Container Platform
  2. Successfully fulfilled a year-long on-site operation and maintenance assignment, ensuring platform stability and providing valuable product improvement feedback.

Project 7: Deepin Server Product Development

2015.05-2018.04 Deepin Server Product Development Software Engineer

- Company Name: Deepin Technology Co., Ltd.
- TechStack: Linux, Python, Shell Scripting, Docker, Jenkins
- Project Description: The project focused on the development and main-

tenance of the Deepin Server product, a domestic Linux-based operating system tailored for enterprise environments. This involved regular release packaging, code compilation, and automation script development.

- Responsibilities:
    1. Developed and maintained UOS server product features.
    2. Created automated scripts for packaging, compiling, and deploying server releases.
    3. Provided technical support for server projects, including remote on-call support.
    4. Conducted pre-research on container platform technologies and customized solutions for clients.
- Achievements:
    1. Successfully released multiple stable versions of the Deepin Server product.
    2. Improved system performance and reduced deployment time through automation.

Project 8: Infrastructure and Operations Management

2013.11-2015.4 Infrastructure and Operations Management Operations Engineer

- Company Name: KnowSec Technology Co., Ltd.
- TechStack: Linux,Shell,Python,Saltstack, Nginx, Nagios, CDN Technologies
- Project Description: The project involved maintaining the company' s infrastructure, operating system, and network environment. Responsibilities included managing the CDN, releasing services, handling fault emergencies, and optimizing the operational management platform and monitoring systems.
- Responsibilities:
    1. Maintained company' s IT infrastructure, including servers, operating systems, and network configurations.
    2. Managed CDN deployments and oversaw release services.
    3. Provided rapid response and resolution for fault emergencies.
    4. Optimized and enhanced operational management platforms and monitoring systems. Achievements:
    5. Improved infrastructure stability and performance through proactive maintenance and optimization.
    6. Reduced downtime and enhanced service reliability through effective fault management.

Project 9: Linux Server Maintenance

2013.5-2013.10 Linux Server Maintenance System Software Engineer

- CompanyName: Inspur Electronic Information Co., Ltd.
- TechStack: Linux, Apache, Bash Scripting, Monitoring Tools
- Project Description: The project entailed maintaining and optimizing Linux servers for Inspur's internal and client-facing applications. This included routine server upkeep, software updates, and performance monitoring to ensure high availability and reliability of the systems.
- Responsibilities:
  1. Maintained Linux server environments to support various internal and client applications.
  2. Performed regular updates and patches to keep the servers secure and up-to-date.

Project 10: Linux Server Maintenance

2011.5-2013.4 Linux Server Maintenance System Software Engineer

- CompanyName: China Standard Software Co., Ltd. (CS2C)
- TechStack: Linux,RPM Packaging ,Koji Build System,Shell Scripting
- Project Description: Ported the Linux operating system to the Loongson architecture, a MIPS-based hardware platform developed in China. This project aimed to ensure compatibility and optimize performance for Loongson processors by adapting Linux kernel and user-space applications. Additionally, automated the RPM build process using Koji, a software build automation system that helps manage and streamline package building, testing, and deployment in Linux environments.
- Responsibilities:
  1. Ported the Linux operating system, including the kernel and necessary drivers, to the Loongson hardware platform.
  2. Collaborated with hardware engineers to debug and optimize the Linux kernel for better performance on Loongson processors.
  3. Developed and maintained RPM package build scripts to ensure seamless integration with the Loongson hardware.
  4. vAutomated the RPM package build process using Koji, enabling efficient management of software builds and releases.
  5. Monitored and maintained the build system to ensure consistent and reliable package deployment.
  6. Contributed to the documentation and training of internal teams on the newly ported system and build automation tools.
- Achievements:
  1. Successfully ported and optimized Linux for the Loongson platform, enhancing system performance and stability.
  2. Implemented a Koji-based automation system, reducing manual effort and increasing the efficiency of RPM package building by 40%.
  3. Improved software deployment cycles and ensured high-quality releases by establishing automated testing procedures within the build

pipeline.