### **Summary**

- Top knowledge in full stack technologies including methodologies (MVC, MVVM, micro service, SOA), DB and proxy (ORM, MySQL, PG, Mongo), RESTful API (OpenAPI, Swagger, DRF), framework (Django/Flask/Spring Boot), cache/messaging (Redis/Rabbit MQ), frontend (Storybook, React, Redux, Angular, material), packaging (Docker), cloud (AWS, Azure), infrastructure as code (TF, Pulumi), DevOps (Ansible), CICD (Jenkins, github action, bitbucket pipeline), e2e test (Cypress, Selenium, pytest), secrets (Hashicorp Vault, Ansible Vault).
- Top engineering team lead/management experience and continuous contribution in any role. Led team of small (<10) and medium scale (40+) as Director, PM, team lead, principal system architect, and individual developer.
- Top flexibility in participating project at different maturity/phase, including new projects from design to production, and legacy projects migrating frameworks, libraries, deployment (on-premise, cloud, hybrid), CICD, security audit.
- Top expert in managing day-2-day activities of software development across SDLC including git (branch, merge/rebase, PR review, tag, conflicts), semantic release, bug tracking, Jira, CICD, DevOps, QA.
- Top experience in setting up, integrating, and mentoring global teams located in different geos/timezones.

## **Experience**

# **3/2022 -** I

3/2023

Lucidum, Principal System Architect, Director

- Laid out next-gen architecture of the system and its development roadmap, supporting on-premise, cloud-native (AWS, Azure), and hybrid.
- Oversaw global engineering team of 17 5 in US (PM, UX, python, DevOps, CICD, AWS), 11 in China (4 Java backend, 3 React frontend, 3 QA, 1 local team lead), 1 in Ukraine (Python). Report to CTO. Oversaw 2 major release, 6 minor releases, and 12 patch releases.
- Oversaw SOC2 compliance. Responsible for daily PR reviews across 50+ github repos including Java, Python, Javascript, React, Groovy, Ansible, Terraform, shell scripts.
- •• Restructured and rewrote 800+ Cypress e2e tests in 6 weeks to achieve 100% automation in UAT. Developed new automation tool to lower time of creating a new test case from 4-8 hours to < 5 minutes.
- Implemented semantic release. Fully automated component release including release versioning, code tagging, changelog, packaging publishing, regression, and continuous component-level upgrade in production.
- Optimized DevOps, reducing iteration time from 1.5 hours to 27 minutes, and AWS VM footprint/cost from \$2k/month to < \$400/month.
- "Contributed a lot of code in React, Cypress, Python, and Ansible."

#### 11/2016 - 3/2022

Lenovo US, P8, Senior Solution Architect, Team Lead

- •• Principal architect of the Lenovo Open Cloud Automation solution, first author of its reference architecture paper. It was productized in 13 months, and has won \$100M+ contracts after launch.
- First author of the Red Hat Hyperconverged Infrastructure (RHHI) Reference Architecture. Principal architect and primary code contributor of RHHI's automated end-2-end deployment.
- Principal architect of the Lenovo Workload Solution Store (WSS). Its orchestration technology forms the core of the ThinkAgile VX product.
- Principal system architect of the ThinkAgile CP product, a private cloud solution. Played a key role in third-party IP evaluation and acquisition. Led UI/UX team of five and DevOps team of four in six major releases and production deployment to AWS and Cloudfare.
- Principal architect of Lenovo's Datacenter Inventory Management System (DCIM), and is its top code contributor.
- •• Second author of the "Lenovo OpenStack Reference Architecture" and "Lenovo Ceph Reference Architecture".
- Contributor of Netbox upstream. Managed 300+ servers and switches spanning across US, Europe and India. Achieved fully automated server onboard discovery, provisioning, and reconfiguration. In production.
- Developed a Django application integrating Gitlab and Jira so that a feature request can be tracked at git commit level from implementation to deployment, giving PM unprecedented insight of a SDLC.
- Support pre-sale and customer engagements, RFPs as an SME in the area of containerization, microservice design pattern, cloud native solution, SDLC, DevOps, CICD, and orchestration.

### 01/2015 - present

PY Consulting, Founder, Freelance

- Contractor, UNC Chapel Hill, School of Medicine. Revived three legacy apps used daily by doctors and researchers. All in production. Setup the organization's first containerized deployment and its first CICD pipeline. Provide training courses on Git workflow, Docker, Python, Javascript, Cypress, Jenkins, Ansible, Github action, Bitbucket pipeline.
- Wolunteer, Mass General Hospital. Created Dockerfile and docker-compose to install deeplabcut and simba, two machine learning tools used by clinic researchers. Mentored team of 3 of Python, version control, Docker. Saved the team hundreds of men-hours.
- Contributor of the World Bank's "Digital Development Partnership" program. Built the World's Snapshot, a data analysis tool in React w/ APIs by the World Bank and the DHS data. It features rich charts using D3, Highcharts, Google charts, eCharts, plotly, Dygraphs.
- **"** Contractor, "Wei Fashion Group", a Shanghai-based fashion company with subsidiaries in US, Europe and China. Built its ERP and e-commerce store.
- Contractor, "Shang Xue Tang", a Beijing high education service company. Built a Django application featuring data crawler, RESTful API,

data streaming, chat room, and forum.

Contractor, "Linkage", a Shanghai startup specializing 0D00(0penERP) customization. Managed 1 business analyst and 3 engineers over two releases. Authored its "2016-17 Technology Roadmap".

#### 11/2013 - 01/2015

Beijing Lean Strategy Consulting Group, Associate Director

- •• Responsible for a \$3M RFP w/ a Fortune 500 company to design its ERP system. Won the contract.
- Oversight project execution. Responsible for P&L. Designed the system architecture. Setup the team's SDLC from ground up. Doubled the team in a year.

### 07/2010

CrunchTime! Information Technology, Project Manager

- -11/2013
- Responsible for a \$10M RFP w/ Yum!China.
- Led development of the company's Customer Portal in SalesForce. Won Bronze prize of the "2011 Steve Awards for Sales & Customer Service" award.
- Designed and built the company's first mobile application prototype using Cordova, HTML5 and jQuery Mobile.

### 04/2009

China Everbright Bank, Business Manager

- -04/2010
- Responsible for a \$2M RFP.
- "Built the division's IT branch from the ground up.

### 04/2004

Bit 9 Inc. (Carbon Black), Researcher, Tech Lead

- 05/2007

\*\* Reverse-engineering Windows NT kernel. One breakthrough won the company a \$6M A-round VC.

#### 07/1998

- 04/2004

Instron Corp., Senior Engineer

Single-handed firmware of its new impact testing line. Sales reached \$1M in the first year.

### **Education**

- MBA, (04/2007 09/2008), Boston University
- M. Sc., (09/1995 05/1997), Ohio University
- B. Sc., (09/1990 07/1994), Shanghai JiaoTong University, China

# Sample writings & projects

- 1. https://lenovopress.com/lp1148-red-hat-hyperconverged-infrastructure-for-virtualization-reference-architecture
- 2. https://lenovopress.com/lp1149-lenovo-open-cloud-reference-architecture
- 3. https://github.com/fengxia41103/storybook
- 4. https://github.com/fengxia41103/worldsnapshot
- 5. https://fengxia41103.github.io/stock/