

Technology Highlights

- “ Extensive expertise in full stack technologies, encompassing various design patterns (MVC, MVVM, microservices, SOA).
- “ Proficient in building RESTful APIs using OpenAPI, Swagger, and DRF, and experienced in working with popular frameworks such as Django, Flask, Express, and Spring Boot.
- “ Adept at frontend development using Storybook, React, Redux, Angular, Vue, Material UI, Bootstrap, and jQuery.
- “ Strong command of DB and proxy technologies (ORM, MySQL, PG, Mongo).
- “ Well-versed in containerization with Docker, cloud platforms like AWS and Azure, infrastructure as code tools such as Terraform and Pulumi, and proficient in DevOps tools such as Ansible.
- “ Skilled in implementing scalable and efficient solution using cache and messaging systems such as Redis and RabbitMQ.
- “ Experienced in setting up and maintaining CI/CD pipelines using Jenkins, GitHub Actions, and Bitbucket Pipelines.
- “ Knowledgeable in end-to-end testing frameworks like Cypress, Mocha, Jest, Karma, Selenium, pytest, TDD/BDD.

Development Leadership Highlights

- “ Extensive experience leading and managing engineering teams, consistently driving impactful contributions in any role undertaken. Demonstrated leadership skills through successfully leading teams of varying sizes, ranging from small (<10) to medium scale (40+), while serving as a Director, Project Manager, Team Lead, Principal System Architect, and individual developer.
- “ Proven versatility in engaging with projects at different stages of maturity and phases, showcasing adaptability in handling a wide range of responsibilities. Experience includes active involvement in new projects, from design to production, as well as revitalizing legacy projects through framework and library migrations, deployment transformations (on-premise, cloud, hybrid), CICD implementation, and security audits.
- “ Highly skilled in efficiently overseeing day-to-day activities of software development throughout the entire SDLC. Proficient in utilizing Git for tasks such as branch management, merging/rebasing, PR reviews, tagging, and conflict resolution. Experienced in implementing semantic release strategies and proficient in bug tracking systems like Jira. Well-versed in CICD methodologies, DevOps practices, and ensuring seamless collaboration between development and QA teams.
- “ Extensive experience in successfully establishing, integrating, and mentoring global teams situated across diverse geographical locations and time zones. Proficient in effectively navigating the challenges associated with managing remote teams, fostering collaboration, and promoting cohesive teamwork.
- “ Extensive experience in mentoring and guiding junior team members to enhance overall team quality and efficiency.

Experience

3/2022 - 3/2023 - Lucidum, Principal System Architect, Director

- “ Led the design of the next-generation product architecture and deployment model, overseeing a successful transition from on-premise-only to a hybrid infrastructure that supports both on-premises and cloud-native environments.
- “ Provided leadership and management for a diverse global engineering team consisting of 17 professionals across multiple locations. Managed a team of 5 in the US, comprising roles such as Project Manager, UX Designer, Python Developer, DevOps Engineer, CICD Specialist, and AWS expert. Additionally, oversaw a team of 11 in China, consisting of 4 Java backend developers, 3 React frontend developers, 3 QA testers, and 1 local team lead. Directly reported to the CTO.
- “ Managed the successful execution of 2 major releases, 6 minor releases, and 12 patch releases, ensuring timely and high-quality deliveries to meet customer expectations.
- “ Demonstrated a keen attention to detail and accountability by conducting daily PR (Pull Request) reviews across a portfolio of 50+ GitHub repositories spanning various languages and technologies, such as Java, Python, JavaScript, React, Groovy, Ansible, Terraform, and shell scripting.
- “ Drove substantial improvements in test automation efficiency and effectiveness. Revamped and redesigned 800+ Cypress end-to-end (e2e) tests within a tight timeframe of 6 weeks, resulting in a remarkable achievement of achieving 100% automation in User Acceptance Testing (UAT). Leveraged Cypress Studio reducing the time required to create a new test case from 4-8 hours to less than 5 minutes.
- “ Implemented a comprehensive semantic release strategy, optimizing the release process for components. Achieved full automation of the entire component release workflow, encompassing critical tasks such as release versioning, code tagging, changelog generation, package publishing, regression testing, and continuous component-level upgrades in production.
- “ Implemented robust optimizations in the DevOps practices, resulting in a significant reduction of iteration time from 1.5 hours to just 27 minutes.
- “ Achieved notable cost savings by optimizing the AWS resources and leveraging cloud-native best practices, slashing monthly expenses from \$2,000 to less than \$400.
- “ Made substantial contributions to codebases across multiple technologies, including React, Cypress, Python, and Ansible. Actively participated in developing and enhancing features, implementing improvements, and ensuring code quality and maintainability in these respective functions and languages.
- “ Led the oversight and management of SOC2 compliance initiatives, ensuring adherence to rigorous security and privacy standards.

11/2016 - 3/2022 - Lenovo US, P8, Advisor Engineer, Senior Solution Architect, Team Lead

- “ Served as the principal architect for the groundbreaking [Lenovo Open Cloud Automation](#) solution, taking on a leadership role in its conceptualization and development. Authored the influential reference architecture paper, providing essential guidelines for its implementation. Successfully transformed

the solution into a market-ready product within a remarkable 13-month time-frame. The solution's exceptional quality and value proposition played a pivotal role in securing contracts worth over \$100 million following its launch.

- “ Distinguished as the first author of the highly regarded [Red Hat Hyperconverged Infrastructure \(RHHI\) Reference Architecture](#). Led the architectural design and development of RHHI's automated end-to-end deployment, assuming a principal architect role.
- “ As the principal architect of the Lenovo Workload Solution Store (WSS), played a pivotal role in shaping the platform's architecture and design. The orchestration technology developed under WSS serves as the core foundation of the ThinkAgile VX product. Product was a Django & React full stack.
- “ As the UI lead of the ThinkAgile CP product, led a dedicated team of five UI/UX professionals and a DevOps team of four, fostering collaboration and driving successful outcomes in six major releases. Development was in Figma, AngularJS, Angular, and Redux.
- “ Contributor of Netbox upstream. Customized Netbox significantly to manage a diverse infrastructure comprising over 300 servers and switches located across multiple regions, including the US, Europe, and India. Employed advanced automation techniques to achieve seamless server onboard discovery, provisioning, and reconfiguration processes. Code were in Django, Python, Ansible, and Bash.
- “ Created a robust Django application that seamlessly integrates GitLab and Jira, enabling the tracking of feature requests at the git commit level throughout the entire software development lifecycle (SDLC). This integration provided project managers with unprecedented visibility and insight into the progression of feature implementation, deployment, and overall SDLC stages.

01/2015 - present PY Consulting, Founder, Freelance

- “ Contractor, UNC Chapel Hill, School of Medicine. Successfully modernized and brought back into production three Python applications that are critical to the daily operations of doctors and researchers. Pioneered the establishment of the organization's inaugural containerized deployment, facilitating improved scalability, portability, and resource utilization. Additionally, spearheaded the implementation of its first Continuous Integration and Continuous Deployment (CICD) pipeline, ensuring streamlined and automated software delivery processes. Provide training courses on Git workflow, Docker, Python, Javascript, Cypress, Jenkins, Ansible, Github action, Bitbucket pipeline.
- “ Volunteer, Mass General Hospital. Containerized the deployment of essential machine learning tools, namely deeplabcut and simba, utilized by clinic researchers. As a mentor, provided guidance and support to a team of three Python developers, imparting expertise in Python programming, version control, and Docker. The mentorship empowered the team to adopt best practices and optimize their workflow, resulting in significant time savings of hundreds of man-hours.
- “ Contributor of the World Bank's "Digital Development Partnership" program. Built the [World's Snapshot](#), a data analysis tool using React, leveraging powerful APIs provided by the World Bank and DHS to ensure accurate and up-to-date data integration. Implemented rich and interactive visualizations by

utilizing a diverse range of charting libraries such as D3, Highcharts, Google Charts, eCharts, Plotly, and Dygraphs.

- “ Contractor, “Wei Fashion Group”, a renowned Shanghai-based fashion company with global subsidiaries in the US and Europe. Played a key role in developing and implementing their Enterprise Resource Planning (ERP) system and e-commerce store using Django & React, driving digital transformation across the organization.
- “ Contractor, “Shang Xue Tang”, a prominent Beijing-based higher education service company. Spearheaded the development of a robust [Django application](#) that served as a versatile platform for various functionalities featuring RESTful API, data streaming, chat room, and forum.
- “ Contractor, “Linkage”, a dynamic Shanghai-based startup specializing in ODOO (OpenERP) customization. Effectively managed a team comprised of one business analyst and three engineers, overseeing their work and ensuring the successful delivery of project milestones. Additionally, I authored the “2016-17 Technology Roadmap” for the company, providing a comprehensive and forward-thinking vision for the technological advancements and initiatives to be pursued during that period.

11/2013 Beijing Lean Strategy Consulting Group, Associate Director

- 01/2015

- “ Led the successful completion of a high-value Request for Proposal (RFP) worth \$3 million with a Fortune 500 company, assuming full responsibility for designing their Enterprise Resource Planning (ERP) system.
- “ Demonstrated exceptional leadership as an overseer of project execution, shouldering the responsibility for the project’s profit and loss (P&L) performance. Additionally, played a pivotal role in designing the system architecture, shaping the foundation for a robust and scalable solution.

07/2010 CrunchTime! Information Technology, Project Manager

- 11/2013

- “ Managed a significant Request for Proposal (RFP) valued at \$10 million with Yum! China. This included understanding Yum! China’s specific requirements, crafting a compelling proposal, and effectively presenting the value proposition of solution.
- “ Led the successful development of the company’s Salesforce Customer Portal, a key project that significantly enhanced the customer experience and streamlined sales processes. The portal were recognized with the prestigious Bronze prize at the “2011 Steve Awards for Sales & Customer Service.”
- “ 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.
- “ Established and built the division’s IT branch from the ground up, demonstrating exceptional leadership and organizational skills.

04/2004 Bit 9 Inc. (Carbon Black), Researcher, Tech Lead

- 05/2007

- “ Led a groundbreaking initiative in reverse-engineering the Windows NT kernel, which resulted in a significant breakthrough that secured the company a remarkable \$6 million A-round venture capital investment.

07/1998 Instron Corp., Senior Engineer

- 04/2004 “ Single-handed firmware of its new impact testing line. Sales reached \$1M in its first year.

Education

- “ MBA, (04/2007 - 09/2008), International Management & Finance, Boston University
- “ M. Sc., (09/1995 - 05/1997), Electrical Engineering (Telecommunication & Digital Signal Processing), Ohio University
- “ B. Sc., (09/1990 - 07/1994), Electrical Engineering, 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/>