

Lei Sun

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SUMMARY

14 years of software development and management experience. Research interests include Systems Performance Analysis and Software Engineering.

EDUCATION

PhD in Mathematics, Claremont Graduate University, California

M.S. in Computer Science, Georgia Institute of Technology, Georgia

B. S. in Urban Planning, Huazhong University of Science and Technology, China

EXPERIENCE

Technical Product Manager **Mercury Insurance, CA-Remote** 2025 - Present

- Evaluate the auto and driver behavior and road safety performance. Evaluate the entire auto insurance value chain, enabling customer and agent experiences.
- Drive the development and adoption of User Interface and API platforms across enterprise.
- Launch tech product 0-to-1, focusing on building scalable, secure, and compliant solutions.

Founder Tech-product **VentureLab at Georgia Tech, GA-remote** 2025 - Present

- Drive software products designs and initiations.

Southeast Associate Director **Sigma Xi, the Scientific Society** 2023 - Present

- Work with the Southeast Region Director to enhance member engagement. Promote Sigma Xi's mission.

Senior Program Manager **Zitara Technologies, CA** 2024

- Drove battery algorithms modeling and embedded software development to optimize Li-ion battery safety, reliability and longevity for rechargeable power sources.
- Technical solutions assessment. Provided architectural solutions for cloud-based data platforms to support predictive analytics for battery systems. Key technology supplier resources management.

Technical Program Manager **TuSimple.ai, CA** 2021- 2024

- Led cross-functional US/CN teams in developing Autonomous Driving embedded and sensor software ADAS/AD features, optimized computing-efficiency platforms for autonomous vehicles. Created roadmaps for OEMs, successfully launched L4 automotive sensor systems integrations for all fleets in the US.
- Managed Sensor software (including camera, LIDAR, RADAR, ultrasonic) program activities.

Technical Program Manager **Feury Image Group, NJ** 2020 - 2021

- Provided technical guidance and solutions for ETL Data pipeline and RESTful API enhancement for suppliers, products, and inventory, enabling real-time product price and customized pricing checking.

Technical Program Manager **Stevens Institute of Technology, NJ** 2018 - 2020

- Delivered research on Apache Big Data projects. Facilitated 100k+ data logs and trained a classification model to performance issues (Nominated 11th ACM/SPEC ICPE2020 Best-Paper)

Senior Program Manager Lead **iQIYI.com, Beijing, CN** 2015 - 2017

- Owner of User Retention, Subscribers Acquisition and Monetization strategies. Designed and launched new mobile features. Analyzed behavior data (200 million records) to deliver new user retention strategies. achieved fast growth, generated 2x user expansion (subscribers from 10 to 30 million in 7 months).
- Initiated a customized check-out platform, brought an additional 5% increase in user growth.

Data Engineer **China Mobile Telecom Shenzhen/Beijing, CN** 2011 - 2015

- Developed data warehouse and data analytics web-based dashboarding for BI systems.

RECENT RECOGNITION

International Journal of Computational Intelligence Systems 2024 Best Reviewer Award 2025

San Diego Business Journal Women of Influence In Engineering Award 2024

IEEE San Diego Section 2024 Distinguished Service Award 2024

IEEE San Diego Section 2023 Honoree 2023

Apache Airflow 2023 Summit Scholarship Recipient 2023

IEEE Standard Association Invited Speaker 2022

PUBLICATIONS

Yutong Zhao, Lu Xiao, Pouria Babvey, **Lei Sun**, Sunny Wong, Angel A. Martinez, and Xiao Wang, Automatically identifying performance issue reports with heuristic linguistic patterns., *ESEC/FSE 2020: Proceedings of the 28th ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, published by Association for Computing Machinery, 2020

Yutong Zhao, Lu Xiao, Xiao Wang, **Lei Sun**, Bihuan Chen, Yang Liu, and Andre B. Bondi, How are performance issues caused and resolved?-an empirical study from a design perspective, *ICPE '20: Proceedings of the ACM/SPEC International Conference on Performance Engineering, 2020*, Page 181-192

Qifeng Zhang, Dehong Qiu, Qubo Tian, **Lei Sun**, Xiu Xu, Deployment Planning of Component-Based Distributed Applications Using Mathematical Programming, *Institute of Electrical and Electronics Engineers*, 2010

Qifeng Zhang, Dehong Qiu, Qubo Tian, **Lei Sun**, Object-Oriented Software Architecture Recovery Using a New Hybrid Clustering Algorithm, *Institute of Electrical and Electronics Engineers*, 2010

Dehong Qiu, Shaohong Fang, **Lei Sun**, An Approach to Sequence Recognition Based on the Similarity Learning of Multi-Degree Distortion. Study of Supercomputer Failures Prediction based on Log Analysis. *2011 Subsequence.Computer Engineering and Science, Vol.33, No.2,2011.*

Qubo Tian, Dehong Qiu, Qifeng Zhang, **Lei Sun**. Application Research of Computers, Vol.28 No.4. Apr. 2011.

Lei Sun, Yi Pan, Comparative Study of Greenway of Boston Metropolitan Park System and the Pearl River Delta - Shenzhen Case Study, *Chinese Landscape Architecture*, Page 17-21, Volume 27, 2011

Wei Yu, **Lei Sun**, Kai Feng, Research on a Telecom Customer Churn Prediction, Application based on a BI Reusable Meta model Method, *Mobile Communications, 2013*