

SOUMEN SARKAR
San Jose, CA, 95129
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SENIOR TECHNICAL DIRECTOR | ARCHITECT

A Senior Technical Director / Architect with over 25 years’ experience in systems architecture and cloud-based product management & leadership in environments ranging startups to large corporations. Hands-on architecture and development experience in web scale e-commerce, global Content Distribution Network (CDN), Telecommunication Network Management & System Engineering. Web scale scalability and complexity management and architecture experience with data architecture, OLTP and OLAP. Published papers on software engineering and digital signal processing. Deeply experienced on Platform strategy and thinking.

Hiring & Onboarding	Technical Mentorship	Cross Functional Leading
Platform Strategy	Web Experimentation	Tech Product Management
SOA / API	High Scale / Low Latency	Agile Scaling
Java / C#	C / C++	Linux
IaaS / IaaS+	Threat Modeling	OLAP / OLTP / NOSQL

Achieved three US patents on cloud native service design for parameter management. MS EE from IIT, India. Certifications:

- Snowflake Cloud Data Warehouse SnowPro Core
- Certified Secure Software Lifecycle Professional (CSSLP)
- Amazon Web Services (AWS) Solutions Architect

PROFESSIONAL EXPERIENCE

2021 **Director, Cloud Apps & DevOps** **Sleep Number Labs** **San Jose, CA**
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I am responsible for advancing the SleepIQ technology platform by being a Director of Technical Program Management. Leading Lean Agile delivery of end to end IOT capabilities spanning across Cloud, Apps and DevOps on AWS.

- Hired FTEs and managed mix of FTE and contractors in Bosnia and Russia. Used Reverse Interviewing methodology to attract and acquire talent.
- Pioneered Risk Management tracking and Driver-Approver-Contributor-Informed (DACI) templated Decision Logging.
- Driving dynamic Resource and Project planning based on roadmap collaboration.
- Leading Sleep Number Enterprise Integration project based on unified identity (OAuth) and Loyalty Tracking (Oracle CrowdTwist) across Mobile and Web
- Scaled Scrum practice over 30 squads by leveraging Jira automation
- Introduced project event tracking in Jira and generated CPM diagram by Lucid chart automation

2020 **Consulting Data Architect / Lead** **InsightGlobal** **San Francisco, CA**

Scaled Agile Framework for enterprise (SAFe) environment embedded consultant in the role of Technical Leader (for a large utility) in data engineering project leading to a decision support system for safe operation. The data analytics project was initially based on AWS Glue data pipeline and then moved to Palantir Foundry data management platform.

- Evaluated Palantir Foundry platform capabilities and helped in decision and migration away from AWS based data pipeline. Self-trained on Palantir Foundry platform and then trained new members on data ingestion, cleansing, enrichment, Ontology and model coordination, visualization
- Led Utility Electric Operation Operability Assessment dashboard development using AWS Redshift, Microsoft BI and Java / Python.

2017 **Tech Director - Architect, Platform** **Macy's** **San Francisco, CA**
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Technical Director role with dual responsibility of Principal Architect and Group Technical Product Manager reporting to Vice President of Enterprise Platform. Few accomplishments:

- Closely managed agile backlog of six platform products in the areas of Core Framework, Experimentation, SOA/API and DevOps leading to developer community requested feature deliveries and consistent enterprise wide acceleration
- Interfaced with Akamai on secure CDN integration for A/B testing and site acceleration
- Led proof-of-concept projects in the areas of API backward compatibility checking and contract testing in continuous integration pipeline resulting in 2x speedup of micro services integration validation
- Authored several internal position papers on enterprise platform point of view like API versioning, Google Spanner tradeoff / decision tree, Product documentation strategy, Product lifecycle and road mapping model, KPI / KRI and monitoring.
- Led and improved SOA Governance process in the context of transition to Google Cloud Platform ensuring cloud native preparedness
- Achieved threefold increase in Enterprise Platform product portfolio Net Promoter Score (NPS) via creation of a self-contained documentation portal by using ReadTheDocs open source product
- Mentored several business analyst / architect roles to transition to technical product ownership role fully or part-time
- Collaborated on shift left DevOps and Security with 12-factor principles leading to mature CI/CD pipeline needed for cloud migration readiness

2012 **Senior Tech Product Manager, Platform** **WalmartLabs** **Sunnyvale, CA**
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Agile Product Owner for several platform products in WalmartLabs private cloud platform team reporting to Senior Director. Working with few technical architects and 20+ developers / managers. Responsibilities included:

- Agile product owner (using JIRA/Confluence) of foundational components of WalmartLabs private cloud platform product portfolio (IaaS / IaaS+) such as Messaging as a Service, Platform for Persistent Orchestration, Cloud Watch / Monitoring and Cloud Configuration Parameter Management.
- Mentored a Software Engineer and Information Security Expert to successfully transition to Associate Product Manager role.
- Product Strategy, Product Communication, Vendor Relationship, Executive engagement. Process Improvement, BRD/PRD/ERD authoring, Bi weekly Demonstration, Quarterly Business Review, Product Roadmap/Status Presentation, Research of Market and Products
- Achieved three US patents on cloud application parameter management

ADDITIONAL RELEVANT EXPERIENCE

- 2011 - 12 **Architect / Senior Manager** **Akamai** **San Mateo, CA**
Architect and Manager of the core server team (eight members) of Akamai's cloud based content distribution network (CDN) platform providing the functionality of media delivery, web security, and web application acceleration. Linux server development using C/C++. Reported to Senior Director.
- 2008 - 11 **Architect / Manager** **NOKIA** **San Francisco, CA**
Hands on software development lead of the Point and Find augmented reality platform team leading in the area of application server, data architecture, scalability, availability and operational reliability for Point and Find mobile application backend platform. Reported to Head of Engineering and worked closely with CTO. Developed Linux based server side using the POrtable COmponents (POCO) C++ Libraries.
- 2006 - 08 **Manager Software Eng.** **Ditech** **Mountain View, CA**
Managed team of six people for Ditech Network's element management system comprising of Java based management system and VxWorks agents. Hired FTEs and contractors. The product enabled Ditech to sell network elements to large telecom operators in US and internationally.
- 2006 **Senior Technical Leader** **Yahoo** **Sunnyvale, CA**
As a member of tiger team in Yahoo Platform engineering organization contributed to C language based development of Yahoo advertisement system named Panama. Panama was a very critical market survival initiative for Yahoo.

2004 – 06	Staff Software Engineer	PayPal	San Jose, CA
	Participated in PayPal site scalability re-architecture project (N-Way & Atlas projects). PayPal was in crucial need of enhancing site scalability to support payment volume growth. Contributed by writing C++ code to verify distributed transaction architecture and scalability of database transaction coordination tier.		
2003 - 04	Technical Leader	IronSpeed	Mountain View, CA
	Developed a parser for IronSpeed Inc's tag language in C# using ANTLR parser generator for the Iron Speed Designer product. The formal grammar based parser replaced hand-coded parser and eliminated many parsing defects.		
2000 - 03	Lead Software Engineer	Atoga	Milpitas, CA
	Developed a novel approach for code generation using XML and XSLT to generate Java and C code for Element Management System software resulting in huge savings and improvement of programming productivity.		
1996 – 2000	Senior Software Engineer	TCSI	Alameda, CA
	Developed telecommunication network management framework using C++ and OSI standards.		

PATENTS

2019	USPTO 10,325,003	Configuration resolution for transitive dependencies
2018	USPTO 9,881,098	Configuration resolution for transitive dependencies
2016	USPTO 9,336,021	Configuring applications at runtime

EDUCATION

- **MS Electrical Engineering**, Indian Institute of Technology (IIT), Kharagpur, India.

PUBLICATIONS

(<https://soumensarkar.weebly.com/>)

- **Model Driven Programming**, published in XML journal of SYS-CON media, August 2002, Volume 3, Issue 8. The article showed an interesting approach of source to source translation through scripting over syntax tree via XSLT.
- **Technical Interviewing Technique**, published in Software Developer's Journal. The article showed a structured approach to interviewing with an engaging problem in algorithm analysis.
- **IEEE** paper on Digital Signal Processing (DSP) to recover signal from channel transformation and noise.