

**SOUMEN SARKAR**

**San Jose, CA, 95129**

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

**SENIOR TECHNICAL DIRECTOR | ARCHITECT**

A Senior Technical Director / Principal Architect with 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 best practices. Published papers on software engineering and digital signal processing. Deeply experienced on Platform strategy and thinking. Skills include:

Hiring & Mentoring	People Leadership	Cross Functional
Platform Strategy	Web Experimentation	Tech Product Management
SOA / API	High Scale / Low Latency	Pragmatic Agile Methods
Java / C#	C / C++	Linux
IaaS / IaaS+	Private Cloud	OLAP / OLTP

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

- Certified Secure Software Lifecycle Professional (CSSLP)
- Amazon Web Services (AWS) Solutions Architect
- Certified Scrum Product Owner (CSPO) and Certified Scrum Master (CSM)

**PROFESSIONAL EXPERIENCE**

2017 - **Tech Director - Principal Architect, Platform**      **Macy's, San Francisco**

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  
17

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.
- Collaborated with information security group for Application Security such as Threat Modeling, OWASP Top 10 compliance, Parameter change audit trail and many more.
- Mentored a Staff Software Engineer and Staff Information Security Expert to successfully transition to Associate Product Manager role. Helped in agile transformation as a key product management stakeholder by being part of Wal-Mart Global E-Commerce Agile Steering Group
- 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 (2016, 2018 and 2019) patents on cloud configuration management and presented on implementing reliable messaging on cloud in industry conference

2011 **Architect / Senior Manager** Akamai, San Mateo, CA  
- 12

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. Reported to Senior Director and responsibilities included:

- C/C++ code and design review
- Program and release management participation
- Hiring senior developers and mentoring junior developers
- IPv6 SSL support of Akamai CDN caching server
- IPv6 / asynchronous DNS support of HTTP load testing tool

2008 **Architect / Manager** **NOKIA,** **San Francisco, CA**  
 – 11  
 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.

### ADDITIONAL RELEVANT EXPERIENCE

2006 - 08 **Manager Software Eng.** **Ditech** **Mountain View, CA**  
**Networks**

Managed team of six people for Ditech'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**  
**Inc.**

Developed a parser for IronSpeed 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**  
**Systems**

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 - **Senior Software Engineer** **TCSI Corp.** **Alameda, CA**  
 2000

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.
- **BS Electrical Engineering**, National Institute of Technology (NIT), Durgapur, 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.