

SHACHINDRA TIWARI

Senior Principal Software Engineer | IAM & Full-Stack Systems Architect

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PROFESSIONAL SUMMARY

Seasoned **Senior Principal Software Engineer** and **Technical Team Lead / Scrum Master** with over 16 years of full-stack engineering expertise architecting high-scale, core Identity & Access Management (IAM) platforms and multi-tenant SaaS systems. Native identity stack engineer specializing in core development of **OAuth 2.1 / 2.0**, **OpenID Connect (OIDC)**, and **SAML 2.0** identity providers, single sign-on (SSO) engines, and multi-factor authentication (MFA) protocols. Trailblazer in next-generation identity architecture—including **Non-Human Identities (NHI)**, **Agent-to-Agent (A2A) authentication**, **Model Context Protocol (MCP)** security, **FIDO Passkeys**, and **W3C Verifiable Credentials (VCs)**. Adept at driving hands-on execution using state-of-the-art AI development workflows while leading high-performing Agile engineering teams.

TECHNICAL SKILLS

Core IAM & Identity Protocols:	Native Stack Development for OAuth 2.1 / OAuth 2.0 (PKCE, Token Rotation), OIDC Provider Core, SAML 2.0 Identity Provider (IdP) & Service Provider (SP), FIDO2 / WebAuthn (Passkeys, CTAP2), W3C Verifiable Credentials (VCs).
Next-Gen Identity & AI Security:	Non-Human Identities (NHI) Governance, Agent-to-Agent (A2A) Authentication & Delegation, Model Context Protocol (MCP) Server Security, AI Agent Identity Frameworks, Zero-Trust Architecture.
Languages & Frameworks:	Java (Core, Enterprise), C/C++, Python, JavaScript/TypeScript, Spring Boot, Spring MVC/Security, Node.js, Hibernate/JPA, React.js, Angular, Bootstrap.
Databases & Storage:	MySQL, MariaDB, PostgreSQL, MongoDB, Redis (Caching/Session), Oracle, Microsoft SQL, AWS Redshift.
Cloud & DevOps:	Docker, Kubernetes, Helm, AWS, Azure, GCP, CI/CD (Jenkins, GitHub Actions), Git, Gradle/Maven, Linux, gRPC, Tyk API Gateway.
Leadership & Process:	Technical Lead, Interim/Acting Scrum Master, Agile/Scrum Methodology, Systems Architecture, TDD, AI-Assisted Dev (Cursor AI, Copilot), Mentorship & Code Reviews.

PROFESSIONAL EXPERIENCE

RSA Security — Senior Principal Software Engineer & Team Lead / Scrum Master	Bedford, MA Jan 2023 – Present
Technical & Team Leadership: Lead cross-functional engineering squads as Team Lead and Scrum Master, steering sprint delivery, core architecture decisions, and hands-on stack implementation. OAuth 2.1 & Core Identity Engine: Spearheaded native engine enhancements for RSA SecurID to conform with OAuth 2.1 standards (PKCE enforcement, strict URI validation, refresh token rotation) and added native FIDO Digital Credentials / Passkeys authentication support. Agent Identity (A2A) & MCP Security: Architected initial frameworks for Non-Human Identities (NHI) and Agent-to-Agent (A2A) authorization protocols; developed custom Model Context Protocol (MCP) servers to securely expose identity verification to LLM agents. Verifiable Credentials: Evaluated and prototyped W3C Verifiable Credentials (VCs) and the Digital Credentials API for decentralized identity verification workflows. Core SSO Stack: Expanded cloud-native Multi-Factor Authentication (MFA) and Single Sign-On (SSO) core stack capabilities.	

Socure Inc. — Staff Software Engineer

Wilmington, MA | May 2022 – Jan 2023

- Designed and developed high-throughput authentication stacks and microservices for Socure's flagship Identity Verification product suite.
- Engineered secure, cloud-native services utilizing Java, Spring Boot, React, AWS, Redis, gRPC, Tyk API Gateway, and PostgreSQL/MySQL.
- Implemented enterprise identity controls and modern token lifecycle management.

RSA Security — Principal Software Engineer

Bedford, MA | 2014 – May 2022

- **Native Protocol Stack Engineer:** Architected and built the core native software stack for SAML and OIDC-based Multi-Factor Authentication (MFA) and Single Sign-On (SSO) services across RSA SecurID products.
- Architected and built the full stack of **MyPage** as a cloud-native SaaS application for SecurID.
- Engineered **Rhapsody**, a browser extension for one-click single sign-on (SSO) vaulting.
- Developed a secure iOS messaging application (Proof of Concept) leveraging RSA SecurID tokens for end-to-end message encryption/decryption.
- Acted as interim Scrum Master, facilitating team delivery, removing blockers, and mentoring junior engineers.

Hewlett-Packard — System Software Engineer

Bangalore, India | 2010 – 2013

- Developed the licensing module for Command View EVA within the HP Array Manager suite using C/C++.
- Automated initial storage array provisioning for HP 6000 Arrays via Smart Start EVA.

GE Healthcare — Design Engineer

Bangalore, India | 2008 – 2010

- Developed core imaging features on the AW Suite for GE AW Workstations.
- Refactored and parallelized general image processing algorithms for GPU/CPU execution, eliminating dependencies on Intel IPP libraries.

EDUCATION

M.S. in Software Systems — BITS Pilani, India

Master of Computer Applications (MCA) — Tezpur University, India

B.Sc. in Mathematics — Gauhati University, India