

SOON F. HOO

Engineering Manager / Lead Software Engineer | Innovation Leadership | Technical Delivery | Reliability

Tulsa, OK | info@sfhoo.com | sfhoo.com | linkedin.com/in/sfhoo

PROFESSIONAL SUMMARY

Senior Software Engineer and innovation-focused technical leader with experience turning emerging technologies into prototypes, intellectual property, member-facing platforms, and production solutions. Led structured ideation programs, facilitated invention sessions, guided engineers, and collaborated across technical and business teams while maintaining hands-on depth in APIs, AI, cloud, reliability, and secure modernization. Inventor on five issued U.S. patents and multilingual communicator across English, Mandarin, Cantonese, Malay, and basic Japanese.

CORE SKILLS

Software Engineering

API design & modernization • REST • Go • application development lifecycle

Innovation Leadership

Generative AI • invention facilitation • patents • emerging technology • prototyping

People Leadership

Mentoring • coaching • onboarding • inclusive facilitation

Delivery & Reliability

CI/CD • automated testing • rollback strategies • observability • on-call support

Leadership

Technical mentoring • invention facilitation • stakeholder collaboration • knowledge sharing

Innovation Influence

Ideation programs • cross-team collaboration • stakeholder alignment • knowledge sharing

Cloud & Infrastructure

AWS • Terraform • Firebase research • infrastructure as code

Risk & Quality

Secure API migration • SDLC controls • compliance • defect remediation

Languages

English • Mandarin • Cantonese • Malay • basic Japanese

PROFESSIONAL EXPERIENCE

USAA | Senior Software Developer and Integrator / Senior Software Engineer

Aug 2012 - Present

- Built a sustained invention portfolio resulting in five issued U.S. patents across distributed ledgers, secure delivery, mutual authentication, IoT security, and telecommunications.
- Led development of a digital innovation platform that generated more than 80 member ideas within one month of launch; facilitated eight invention sessions and 93 innovation activities to engage teams in structured ideation.
- Advanced emerging-technology exploration through generative AI delivery, machine learning, blockchain, Web3, computer vision, AWS, Terraform, and Firebase research; translated findings into proposals, prototypes, invention submissions, and knowledge-sharing sessions.
- Delivered a new member-facing life-event support service to production and collaborated on a high-profile generative AI initiative that finished on time and received stakeholder and sponsor acceptance.
- Mentored engineers through structured development goals, career guidance, Go learning, platform knowledge transfer, and onboarding; previously coached 20 new colleagues to support faster transition into software-development work.
- Delivered a modern member API to production that enabled integrations across multiple onboarding and eligibility experiences and contributed to retirement of legacy WebSphere workloads.
- Expanded continuous delivery safeguards with production validation and 100% rollback capability for delivered features; also advanced automated testing in build pipelines, including performance testing.
- Researched and resolved production HTTP 401 errors of previously unknown origin and implemented release-management capabilities to strengthen availability and operational support.
- Delivered earlier enterprise innovations including a health-cost advisory tool launched to 13 million members and service representatives, a digital claims flow that reduced payment time from 30 days to under 7 days, an accessible mobile check-deposit experience, and a regulatory search capability for legal users.

IBM | Software Engineer

Jan 2012 - Aug 2012

- Developed and integrated a multi-tier SaaS talent-management application using Java enterprise technologies, collaborating with client services and quality assurance to diagnose production defects, validate workflows, and implement corrections.

Nokia | Software Engineer

Jun 2011 - Jan 2012

- Reduced memory consumption of a traffic-management web interface by 75% and migrated multiple real-time, high-volume traffic applications to a new Java-based architecture.
- Managed production releases, implementation planning, testing, and deployment automation for high-availability traffic-information applications.

Infor Global Solutions | Software Engineer

Oct 2007 - Jun 2011

- Led design of a pricing formula engine supporting multi-line ordering, adjustment allocation, and units of measure; also designed and maintained the component data model.

Zen-tinel | Software Engineer

Jan 2006 - Oct 2007

- Developed GPS-enabled fleet-tracking and embedded telemetry solutions integrating GPS, RFID, vehicle diagnostics, mapping, and cellular communications for school transportation customers across 10 states.

PATENTS

- **US 12,726,343 B1** | Systems and Methods for Adding Trusted Blocks to Distributed Ledgers | Sep 1, 2026
- **US 12,704,856 B1** | Secure High-Precision Delivery System and Method | Aug 11, 2026
- **US 12,483,555 B1** | Mutual Authentication System | Nov 25, 2025
- **US 12,361,146 B1** | Hardware-Agnostic IoT Security | Jul 15, 2025
- **US 11,178,521 B1** | Message Dispatch System for Telecommunications Network | Nov 16, 2021

EDUCATION & CREDENTIALS

Indiana University of Pennsylvania | B.S. Computer Science, Minor in Mathematics | Honors, GPA 3.34