Sudarshana Karkala

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SUMMARY

Engineering Leader and Solution Architect with 19 years of experience delivering impactful software solutions across Mobile Security, Travel, Energy, Electric Vehicle and Telematics domains. Proven expertise in developing apps for Installer's Toolkit, Mobile Security, Battery Management Systems. Renowned for orchestrating end-to-end product development, leading high-performing Agile teams, and creating customer-centric innovations. Passionate about solving complex technical challenges with innovative approaches.

"I hired Sudarshan at Enphase to lead ITK engineering team. Installer ToolKit is a key mobile application to help installers commission the Enphase system for customers. Sudarshan played a key role in migrating the application to latest tech stack for iOS, Android and backend services and resolve critical customer issues to improve overall customer experience. This helped in significantly improved app rating. Sudarshan is technically sound, hardworking, and extremely good team player. It was a pleasure working with Sudarshan and I wish him all the best for future endeavours." ~ Ashish Bansal, Vice President, Enphase Energy, Bangalore, India.

SKILLS

- Technical Leadership: Native mobile development (iOS, Android), Cloud apps, IoT/Telematics security, AI & ML.
- **Team & Process Management**: Agile, Scrum practices, Cross-functional collaboration, Performance reviews, Hiring, People management, Conflict management, Change management, Contractor's billing, Business Model Canvas.
- Technical Expertise: Swift, SwiftUI, SwiftData, Core Data, BLE/Wi-Fi Protocols, Secure software development
- Architectural Design & Practices: UML, Design patterns (MVC, MVP, MVVM, VIPER), CICD, Code reviews
- EV & Energy Solutions: Battery Management Systems (OCPP, MQTT), Solar Energy Solutions for Installers.

EXPERIENCE

CAR Software Systems | EV.Engineer (Startup)

Bangalore, India

Software Consultant (EV, Mobile, Cloud)

Dec 2024 - Present

- **Spearheaded** the architectural design and proof of concept (POC) for cutting-edge Battery Management Systems, integrating advanced features to improve EV efficiency and safety.
- **Partnered** with clients to develop innovative products tailored to overcome critical challenges in Electric Vehicle (EV) infrastructure, enhancing industry standards.
- Implemented Al-driven analytics to transform EV battery performance monitoring, resulting in optimised battery health management and extended life cycles..

Enphase Energy Private Limited

Bangalore, India

Sr. Engineering Manager (iOS, Android, Cloud)

July 2021 to Dec 2024

- Directed a team of 30+ engineers to deliver impactful solar energy solutions. | Installer Toolkit App (Rating:4.3)
- Developed and deployed ITK TechSupportAl powered by Gen AI, significantly improving the efficiency and quality
 of customer support services.
- Architected and executed project roadmaps, streamlining processes and improving code quality through comprehensive reviews.
- Optimised app usability by implementing features such as IQ Gateway, IQ Battery, Provisioning and Functional
 Validation
- Amplified product adoption and user satisfaction through continuous feature enhancements and bug fixes.

McAfee Software Private Limited

Bangalore, India

Engineering Manager (iOS, Android)

October 2011 to July 2021

- Orchestrated the development of <u>McAfee Mobile Security</u> for iOS from scratch (Rating: 4.7).
- Delivered advanced security features, including VPN, jailbreak detection, secure data vault, and location tracking, ensuring robust mobile app protection.
- Governed Agile practices as a Certified Scrum Product Owner, managing backlogs, roadmap planning, and analytics tracking.
- Designed and implemented a **telematics app** to analyse vehicle driving patterns, enhancing safety and security.
- Achieved over 3M direct app downloads with a customer-centric approach to feature delivery.

Previous Roles

Held key technical positions at eNovate Media Solutions, Ness Technology (<u>Amadeus</u>), NMS Communication contributing to software innovation and technical excellence from 2005 to 2011.

EDUCATION

BE – Information Technology (Distinction across all semesters)

National Institute of Technology Karnataka (NITK), Surathkal

June 2001 to May 2005

CERTIFICATIONS

• Electric Vehicle Engineering and Renewable Energy (IIT Madras - CODE, NPTEL)

In Progress - Dec 2025

- Generative AI Certification Google Cloud Skills Boost, AWS
- Certified Scrum Product Owner (CSPO) Scrum Alliance

ADDITIONAL INFORMATION

- Organised and delivered workshops on cutting-edge topics like IoT, and Telematics Engineering, fostering technological awareness among students, professors and professionals.
- Recipient of McAfee, Ness Spotlight Awards for CSR, innovation and performance excellence