

Sudarshana Karkala

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PRODUCT DEVELOPMENT | SOLUTION ARCHITECTURE | TECHNOLOGY & INNOVATION PRACTICE

SUMMARY

Engineering Leader & Mobile Solution Architect with 20 years in Software Development, specialising in **Mobile Security, Electric Vehicle, Solar Energy, and Telematics Software Development**. Proven expertise in developing apps for Enphase's Installer Toolkit and McAfee's Mobile Security. 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.

SKILLS

- **Technical Leadership:** Native **Mobile** development (iOS, Android), **IoT, EV Battery**, Cloud/AWS, Solar Energy.
- **Team & Process Management:** Agile, Scrum practices, Cross-functional collaboration, Performance reviews, Hiring, People & **Product** management, Conflict & Change management, Contractor's billing, Business Model Canvas.
- **Technical Expertise:** Python, **Swift, SwiftUI**, Core Data, BLE/Wi-Fi Protocols, **Automotive Cybersecurity, UI/UX**
- **Architectural Design & Practices:** AWS, UML, Design patterns (MVC, MVP, **MVVM, VIPER, MQTT**), CI/CD

WORK EXPERIENCE

CAR SOFTWARE SYSTEMS (Pre Startup)

Bangalore, India

Solution Architect (EV Battery - Safety & Security)

December 2024 - Till Date

- 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.
- Currently solving EV Battery issues using AI-powered software solutions.
- Website - carsoftwaresystems.com

Enphase Energy Private Limited

Bangalore, India

Sr. Engineering Manager (iOS, Android, Cloud)

July 2021 to December 2024

- **Directed** a team of 30+ engineers to deliver impactful solar energy solutions.
- **Architected** and **executed** [Installer Toolkit App](#) (4.4 star rating) product, worked on roadmaps, **streamlining processes** and improving code quality through comprehensive reviews.
- **Optimised** app usability by implementing features such as **IQ Gateway, IQ Battery, EVSE, Provisioning** and **Functional Validation**, resulting in a 25% increase in user engagement.
- **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

- Led the end-to-end development of **McAfee Mobile Security** for **iOS**, achieving a 4.7-star rating. **(12+ engineers)**
- Delivered advanced security features, including VPN, Jailbreak detection, **Secure data vault**, device discovery, **Automotive Cybersecurity** and location tracking, ensuring robust mobile app protection.
- Led Agile adoption as a **Certified Scrum Product Owner**, optimised backlog management and roadmap execution and analytics tracking.
- Designed and implemented a **Telematics Security** feature to analyse vehicle driving patterns, enhancing safety and security.
- **Achieved over 3M direct app downloads** with a customer-centric approach to feature delivery. Integrated **in-app purchase** and **increased paid user adoption by 30% over 12 months** by improving usability & feature set.

eNovate Media Solution Private Limited

Bangalore, India

Technical Leader (iOS)

December 2010 to August 2011

- Designed and Developed multiple educational applications (**eReader**) for Pearson client.
- Mentored iOS team - UML design and iOS App Development

Ness Technology Private Limited (Amadeus Private Limited)

Bangalore, India

Senior Software Engineer (iOS)

July 2009 to November 2010

- Designed and Developed **CheckMyTrip** Mobile Companion app for iOS from scratch.
- Also, contributed to Mobile e-Retail Channel Initiative for Amadeus.

NMS Communication Private Limited (Openera, LiveWire Mobile)

Bangalore, India

Senior Software Engineer (Java, J2ME, WinCE)

June 2005 to July 2009

- Developed Full Track Music using Java, XML, Web Services (Authentication, Provisioning) from LiveWire Mobile.
- Development prototype for MyCaller using J2ME Polish. Contributed to IMS Client, Peer to peer media sharing app.

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 Development (IIT Madras - CODE)** April 2025
- **Certified Scrum Product Owner (CSPO)** – Scrum Alliance
- Generative AI from Google cloud skills boost (Link)
- Services Marketing and Persuasive Communication to B2B Customers (NITK Surathkal)

ADDITIONAL INFORMATION

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

REFERENCES : Available on Request

[LinkedIn](#)

"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.