

Krishna Subramanian

Software Engineering Leader

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German Citizen

Summary

Engineering leader with 10+ years of experience building software and leading technical teams, specializing in user-centric product development and data-driven engineering practices. Leadership philosophy centers on empowering teams through clear responsibilities, adequate resources, and supportive systems that enable autonomy and success. PhD in HCI from RWTH Aachen University with research recognized by Best Paper (Honorable Mention) award at CHI 2021.

Professional Experience

devolo solutions GmbH

Head of Software Engineering

Aachen, Germany

May 2021–Present

- Lead multiple cross-functional engineering teams building software for millions of connected devices and network management solutions
- Architect and oversee development of flagship applications serving 50K+ active users monthly
- Built and maintain hawkBit backend framework managing over 4 million IoT products in production
- Rebuilt testing and quality infrastructure after organizational changes, defining test strategies, establishing ownership, and implementing automated release pipelines
- Established data-driven engineering culture with analytics dashboards, Jupyter tooling, and internal tools (firmware monitoring, review automation, CI/CD)
- Mentor engineers and supervise Bachelor's, Master's, and MATSE students on technical projects and research theses

Media Computing Group, RWTH Aachen University

Research Assistant

Aachen, Germany

Aug 2014–Sep 2020

- Published 6 peer-reviewed papers (113 citations) at intersection of data science and HCI, pioneering qualitative research methods at the lab
- Designed and built multiple research software systems including ARPen (iOS 3D modeling in AR), TRACTUS (RStudio addon for hypothesis tracking), StatWire (visual IDE for R), and Statsplorer (statistical analysis tool)
- Supervised 20 students (9 Bachelor's, 11 Master's theses) on topics spanning statistical tools, UI design, and interaction techniques
- Instructed 'Designing Interactive Systems' course (150+ attendees annually) for six years, pioneering shift to flipped classroom model during Covid for hands-on learning

Education

RWTH Aachen University

Doctor of Philosophy in Computer Science

Honors: Best Paper (Honorable Mention) at CHI 2021

Aachen, Germany

Sep 2020

RWTH Aachen University

Master of Science in Media Informatics

Aachen, Germany

Feb 2014

Amrita University

Bachelor of Technology in Computer Science

Coimbatore, India

May 2011

Skills & Expertise

Leadership: Coaching & mentoring, Performance management, Stakeholder communication, Budget management

Technical Strategy: System design, Distributed systems, APIs & integrations, Event-driven architectures

Delivery and Product: Agile/Scrum & Kanban, Roadmapping & prioritization, CI/CD, MVPs, Test automation, Release management

Security and Compliance: Cybersecurity standards (EN 18031-1), GDPR compliance, Accessibility standards

UX and Design: User research, Prototyping, Usability testing, Design systems, Figma

Engineering and Platforms: AWS, Docker, Grafana, Jenkins, Svelte/SvelteKit, Angular, TypeScript, Flutter, iOS

Data and Analytics: Python/Pandas, R, MySQL, Bloomreach, Firebase, A/B testing

Languages: English (Native), German (Professional)