

# KRISHNENDU (KRISH) KAR

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[https://www.amazon.com/Krishnendu-Kar/e/B088FYDYDK/ref=dp\\_byline\\_cont\\_ebooks\\_1](https://www.amazon.com/Krishnendu-Kar/e/B088FYDYDK/ref=dp_byline_cont_ebooks_1)

## Director – Digital Product Development

### Leadership in digital (cloud, app, computer vision, AI/ML) product development

- Built team & launch connected product from concept to launch - cloud, mobile, UI/UX, DevOps, QA, CS & PM
- Managed IOT projects from concept to launch-residential, industrial & asset tracking - MQTT SparkPlug device, AWS IOT -stream, DynamoDB, lambda, API, mobile
- Trained & deployed computer vision model - YOLOV7, RCNN, PoseNet, ResNet, Inception - cloud & local PC
- Lead vehicle control embedded software development for 20+ production launches using MATLAB/SIMULINK
- Author of - Mastering Computer Vision with TensorFlow2.x
- US Citizen, DFSS Six Sigma Black Belt
- 15+ years (2005 to current) of technical product & software engineering experience
- 5+ years of experience simplifying complex business operations
- Developed digital minimum viable service (MVS) to collect data from early SAAS adopters
- Launched 10+ B2C IoT products
- 5+ years of experience managing cross-functional teams & driving standardization
- Author of 20+ patents, 2 iOS apps and 1 book
- Executed multiple software solutions to generate recurring revenues

<b>Technical Knowledge</b>	AWS IOT Core, lambda, AppSync API, S3, Cloudwatch, Cognito, DynamoDB, Kinesis, Redshift, Sagemaker, TensorFlow, Python, OpenCV, ObjC, Swift, MATLAB, Simulink, Jira, GCS, Azure
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## PROFESSIONAL EXPERIENCES

### **Senior Manager Digital Products (B2C) – Kidde - Carrier Corporation.** 04/2021 - present

Build digital team and lead connected smart home product execution

#### **Noted Accomplishment:**

- Build and managed cloud, mobile, QA and DevOps (Circle CI) team for inhouse IOT development at scale with million plus consumers - prepare JD, perform interview, onboard and mentor
- Owned and managed cloud and mobile road map by coordinating with Engineering, MarTech & Quality
- Execute roadmap into Jira by prioritizing Epics, developing long range and Sprint planning, overseeing daily scrum call with 20 team members, eliminating roadblocks and through test automation
- Build digital IOT product architecture and implemented solutions for cloud, web and mobile app.
  - Develop rules to send IOT data to Kinesis stream, lambda, DynamoDB & connect to GraphQL API
  - Developed connected ecosystem of devices using cloud to cloud API integrations in lambda
  - Deliver timely product release through user story, validation, backlog grooming & task execution
  - Develop architecture and access patterns to simplify database from AWS SQL to DynamoDB
  - Understand customer issues and provide timely solution to improve retention and product rating
- Architecting solutions for subscription-based service and partnership to generate revenue.
- Resolved customer issues on time, developed customer survey and improved UX solutions.
- Analyzed customer data to improve product positioning and feature improvement.

### **IoT Technical Project Manager & Solutions Manager | Ayla Networks.** 07/2020 - 04/2021

Managed 8 (smart home, kitchen service) projects using Ayla IoT platforms for Linux and ESP 32 devices - BLE WIFI based fan, oven control: (mode, speed, status, temperature, humidity & AQI) Alexa / Google Home

#### **Noted Accomplishment:**

- Managed agile project development using GanttPRO, Trello board, Harvest, Jira & Confluence
- Developed IOT connected kitchen solutions to generate recurring revenue for connected kitchen stores
- Use cloud data AI/ML to predict network failure for major cellular company thus saving in millions

**Director, Solutions Development | MOBICA, LLC.** 2019 - 2020

Led a team of 5 developers and interfaced with sales to develop AI & IOT solutions. Participated in bid calls and presented compelling presale demo solutions, proposals, project timeline & resourcing.

**Noted Project Accomplishment:** Developed an E2E IOT & Computer vision platform in Mobica

- Optimized & trained neural network model and deployed in mobile devices for R&D project
- Developed proposal, performed business review and capability analysis and staffed resources
- Coached and mentored employees, participated in onboarding and performance reviews

**AI/ML iOS App & TensorFlow Lead | Nity Vision, LLC. Start up.** 2016 - Present

Led development of optimized deep learning framework for edge computing

**Noted Accomplishment:**

- Published ADAS & activity recognition iOS app - [Nity Map & Dash Cam](#), [Stretch Tracker](#)
- Published the book - [Mastering Computer Vision with TensorFlow 2.x](#)
- Optimized and trained CNN model for deployment in edge devices - model splitting & parallel computing

## General Motors

**Engineering Group Manager, Embedded Controls & Software** 2017 - 2019

Engaged in recruiting, career development while implementing DevOps system for continuous delivery.

**Noted Accomplishments:**

- Managed a team of 15 software engineer including hiring, performance review and 1:1
- Simplified toolchain by using automated methods to save 15 days efficiency gain for software delivery
- Lead chassis technology for ISO 26262 standards including electronic slip control, all-wheel drive control

**Product Strategy Manager** 2015 - 2017

- Managed 50+ projects to create solutions to maximize tooling utilization & parts reuse
- Reduced complexity for vehicles by increasing reuse and developing parts solution to generate incremental revenues
- Developed neural network for ADAS steering control, adaptive cruise control, brake control

**Product owner, embedded software, Drivability** 2005 - 2015

Managed scalable embedded control system algorithm and technology stack using DevOps & CI/CD for speed control and drivability with MATLAB, SIMULINK, C++, Python for a broad range of GM vehicles.

**Noted Accomplishments:**

- Managed global delivery of embedded software (team of 50+) using HIL/SIL, DFSS, DFMEA.
- Developed vehicle dynamics control systems based on PID, MPC (model predictive control)
- Published 20+ patents on drivability, powertrain, DFCO, and fast speed control.

## EDUCATION AND TRAINING

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Master of Business Administration, University of Rochester	1999 - 2003
PhD in Mechanical Engineering, West Virginia University	1990 - 1994
Master of Science in Mechanical Engineering, University of Calgary	1988 - 1990
Bachelor of Technology in Mechanical Engineering, Indian Institute of Technology	1984 - 1988

## RELEVANT PUBLICATIONS

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<https://www.amazon.com/Mastering-Computer-Vision-TensorFlow-2-x/dp/1838827064>

<https://apps.apple.com/us/app/nity-dashcam-ai-map/id1229479479>

<https://apps.apple.com/us/app/stretch-tracker/id1557067609>