

NIRMAL KHEDKAR

Software Engineer and Cloud Enthusiast

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EDUCATION

University of Colorado - Boulder
Master of Science - Computer Science

Aug 2024 - Ongoing

National Institute of Technology Karnataka
Bachelor of Technology - Information Technology

July 2018 - May 2022

TECHNICAL STRENGTHS

Languages Java, Javascript, MySQL, MongoDB, C/C++, Python, GraphQL
Frameworks Springboot, Mockito, Project Reactor, MEAN/ MERN, Android, Typescript,
React Native, Gatsby, Rails, NextJS, NestJS, R2DBC, WebVR
Tools Google Cloud, Jenkins CI, Kubernetes, Prometheus, Tableau, Sentry, Linux, Gen AI

PROFESSIONAL EXPERIENCE

Visa Inc.
Software Engineer

June 2022 - July 2024

- Migrated Springboot services to asynchronous Reactor architecture for significant performance improvements. Also handled all security, test, infra and deployment issues for the release of these components in internal test environments and production.
- Proactive in handling unpredictable client and production errors, ensuring system stability and uptime.
- Introduced test coverage practices and end-to-end Jenkins pipelines, improving engineering practices at my team and reducing development time by 45%.

Visa Inc.
Software Engineer Intern

May 2021 - July 2021

- Analyzed several data points within the Visa Developer Platform ecosystem to gather data on route, API, product and client levels.
- Merged the said data into a single backend service and developed a frontend portal for querying. - The product became the base for dynamic throttling and load prediction projects at Visa.

Twizzr.com
Tech Lead (part-time)

Oct 2019 - May 2022

- Brainstormed business requirements, design plans and translated and refactored code for scalability and future compatibility.
- Implemented linters, automated version bumps and CI-CD pipelines for enhanced development experience and code quality. Additionally, I introduced customer engagement tools like chatbots and analytics for proactive error resolution and insights into customer experience.

RELEVANT COURSES AND CERTIFICATION

GCP Big Data and ML Fundamentals Google Cloud - Coursera
Engineering Data in Google - Qwiklabs
Prompt Engineering - How to talk to the AIs - LinkedIn
CKAD Crash Course - O'Reilly
Learning the OWASP Top 10 - LinkedIn

PROJECTS

AR Visualization of Human Anatomy

WebVR, Javascript

Created a human anatomy learning system using augmented reality technology and human-computer interaction principles. We also evaluate the application's usefulness by testing it with an audience to understand its effectiveness for learning and understanding.

Farm-fresh E-Commerce Portal

MERN, Javascript

Built a full-stack website for farmers to sell produce directly to consumers, without mediators, thus increasing farmers' income and reducing the market prices.

Reference based Image Colorization

Computer Vision, Colorization

Studied and built a model that can efficiently colorize an entire sketch without continuous user intervention.

ACADEMIC ACHIEVEMENTS

Vehicle Re-identification Using Convolutional Neural Network

Jan 2023

Research Paper - ICADCML 2023

The paper describes the usage of convolutional neural networks with vision-based techniques to accurately identify vehicles across multiple cameras without being dependent on their number plates.

NIT Conclave 2019

Hackathon

2nd Position for College

I participated in the hackathon team, developing a full-stack social network platform tailored to connect researchers and facilitate collaboration.

VOLUNTEERING ROLES

Integrated Resources and Information Technology (IRIS), NITK

July 2019 - May 2022

Frontend Advisor and Web Developer

NITK Surathkal

- I worked for IRIS in its Web Development Team, contributing to design upgrades, feature enhancements and supporting production fixes.
- Contributed towards improving Admission Modules and major design improvements for CEMS, CDC, and Profile Module.

The Institute of Engineering & Technology, NITK

May 2020 - May 2022

Webmaster

NITK Surathkal

- Redesigned IET NITK website from scratch to detail activities done by the group.
- Integrated this website to a content management system, simplifying web content maintenance.
- Streamlined several manual, unorganized processes onto the website, increasing group participation.