

KRUPA KADECHA

SKILLS

Languages

Python · C++ · Swift · Objective-C ·
SQL · Java · React Native

AI/ML Robotics

ML Algorithms · Neural Network ·
Image Processing ·
Reinforcement Learning · YOLO ·
PyTorch · Tensorflow · scikit-learn ·
LLM (OLLAMA)

Robotics

ROS2 Humble · SLAM · Path Planning ·
Control system · Gazebo · RViz

Mobile Development

iOS Application Development · SwiftUI ·
UIKit · CoreData ·
React Native (Cross Platform
Development)

Operating Systems

MacOS · Windows · Linux

Tools

XCode · Github · PyCharm · Jupyter ·
VSCode

REFERENCES

Kapil Sharma (Reliability
Engineer Ops Director)

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Senior Software Engineer | Transitioning to AI/ML & Robotics

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Greater Toronto Area, ON, CA

SUMMARY

I am a seasoned Software Engineer with over 10 years of experience specializing in iOS development and a recent Master's from Laurentian University, focusing on AI, ML, Deep Learning, and Robotics. My expertise includes building machine learning models, computer vision systems, and robotic control using frameworks like TensorFlow, YOLO, and ROS 2. Currently working on projects in object detection and natural language understanding, I am now transitioning to roles in AI, ML, or Robotics Engineering to combine my software engineering expertise with cutting-edge technologies and drive impactful innovations.

PROJECTS

Human Robot Interaction to detect and locate Specific Object 09/2024 - 12/2024

Laurentian University, Sudbury, ON, CA

Combining AI, Computer Vision, and Robotics for task execution

- Developed a robotics system as part of academic work where a robot interprets human commands using **Ollama** for natural language understanding. Integrated **YOLO-based object detection** to locate and identify specific objects mentioned in the command. Programmed the robot to perform actions like finding or moving toward the detected object, combining AI, computer vision, and robotics for task execution.

Traffic Sign Detection 09/2024 - 12/2024

Laurentian University, Sudbury, ON, CA

Road Sign Detection with Machine Learning

- Implemented a road sign detection system as part of academic work, utilizing a **Kaggle dataset** for training and **YOLO** for real-time object detection. Focused on accurately identifying various road signs to enhance automated driving systems and traffic monitoring applications.

PROFESSIONAL EXPERIENCE

Senior Software Engineer 01/2022 - 08/2023

Ecosmob Technologies

Ahmedabad, GJ, IN

- As a senior developer, I extensively worked on their VoIP and WebRTC-enabled PaaS system, collaborating with clients, project managers, and design teams, while successfully delivering cross-platform projects, including one for both Android and iOS, within a year.

Consultant - iOS Developer 12/2018 - 12/2021

Scriptbees IT Private Limited (formerly AMS Technologies)

Remote

- Worked remotely for three years, providing client support, developing modules, enhancing products, customizing branding, troubleshooting, reducing app loading time by 50% through code refactoring and caching, and decreasing bug incidents by 40% with automated testing and CI workflows..

iOS Developer 07/2016 - 11/2018

Brevity Software Solutions Private Rajkot Limited

Rajkot, GJ, IN

- During three years at Brevity as an iOS Developer, I streamlined development by reducing time by 20% with custom tools, led a team of six to deliver fully functional iOS and Android apps in four months, and secured a long-term project with a 15-member team, marking a major company achievement.

PROFESSIONAL EXPERIENCE

iOS Developer	06/2013 - 07/2016
TheAppGuruz	Rajkot, GJ, IN
<ul style="list-style-type: none">• At TheAppGuruz for 2+ years, I specialized in Image, Video, and Audio processing app development as an iOS Developer, managing both application development and targeted R&D based on specific requirements.• Learned Image and Video processing and developed more approx 7-8 applications based on Image Processing.	

EDUCATION

Masters in Computational Sciences	09/2023 - Present
Laurentian University, Sudbury, ON, CA	Sudbury, ON, CA
Master of Computer Applications (MCA)	2010 - 2013
Gujarat Technological University	Ahmedabad, GJ, IN
Bachelor of Computer Applications (BCA)	2007 - 2010
Saurashtra University	Rajkot, GJ, IN