

Summary

2+ years experience of *Deep Learning R&D* for several industries like manufacturing, autonomous vehicles, retail etc. Implementation knowledge of Machine Learning and Computer Vision research papers to production. Experienced working in international teams to develop projects from ideas to deployments.

Education

Nara Institute of Science and Technology

M. Eng. Information Science

Indian Institute of Technology

B. Tech. Electrical Engineering

Nara, Japan 2013–2015

Jodhpur, India

Previous Employment

Abeja Inc. Tokyo, Japan

Researcher and Developer

Abeja is a B2B *Platform as a Service* company that provides AI solutions across several industrial domains. Within an international team, I am responsible for conceptualizing and designing deep learning solutions for PoC projects.

Rapyuta Robotics Tokyo, Japan

Robot Navigation Intern

Oct'15-May'16

Aug'16-Curr

Rapyuta Robotics is developing cloud platform for robots such as drones for easier autonomous deployments. I developed and extended state-of-art algorithms for Cloud based RGBD SLAM. In a team of 4, conducted weekly live demos for potential clients on aerial vehicle obstacle avoidance.

Technical Skills

- o **Programming Languages:** Proficient in: Python, C++, LATEX
- o Software Skills: PyTorch, Tensorflow, OpenCV, Docker, Scikit-Learn, Scipy
- o Data Science Skills: Supervised Modelling for Classification, Regression, Data Cleansing, EDA.

Publications

Book, Packt Publishing

Practical Computer Vision

2018

This book is designed for developers or undergraduate students who would like to have a practical approach in learning and implementing current computer vision algorithms. It consists of chapters ranging from simple image processing to deep learning based object detection and follows OpenCV, Keras and Tensorflow as development environment.

AIR, 2015

Modeling occupancy grids using EDHMM for dynamic environments

2015

Map generation of mobile robots over long periods of working suffers from inconsistencies because of gradual changes in the environment. This work presents filtering of occupancy grid into dynamic and static and results show robust detection of dynamic changes in the grid map, even in the presence of occlusion.

Presentations

- Machine Learning Kitchen Tokyo, Mar 2017, Tokyo Delivered a talk on "Object Detection Pipeline" utilizing deep learning based object detectors such as Faster-RCNN,SSD etc.
- o In and Around CNNs, April 2017, Tokyo A talk on the working of CNNs in computer vision.