Abhinav Dadhich

resbyte.github.io
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EDUCATION

NAIST, JAPAN
M.Eng. in Information Science
Oct 2013 - Sept 2015 | Nara, Japan

IIT, JODHPUR
B.Tech. in Electrical Engineering
Aug 2009 - May 2013 | Jodhpur, India

SKILLS

PROGRAMMING
Python • C++
Familiar:
Pytorch • Mxnet • Keras/Tensorflow • OpenCV • Nvidia-Docker • Scikit-learn • Caffe • ROS • PCL
Datasets:
MSCOCO • Pascal VOC • MPII
Robots:
TurtleBot • Quadcopters

LINKS

Github:// **ResByte**
LinkedIn:// **adadhich**
Quora:// **Abhinav-Dadhich**

COURSEWORK

GRADUATE
Robotics
Computer Vision
Foundations of Artificial Intelligence
Ambient Intelligence
Computational Neuroscience
Computer Graphics

SUMMARY

I am interested in applied deep learning in computer vision across several domains. I have worked with popular frameworks such Pytorch, Mxnet, Keras etc. to develop models for image classification such as Inception, Resnet etc., for object detection such as SSD, Faster-RCNN etc., for generative modeling such as GANs, VAE etc. Other projects that I have worked to develop Visual SLAM, 3D Mapping etc.

INDUSTRIAL EXPERIENCE

ABEJA, INC | Researcher
Aug 2016 - | Tokyo, Japan

Within an international team, I am responsible for conceptualizing and designing deep learning projects. I provide mentoring to understand deep learning and computer vision for practical applications. With an understanding of recent research and state-of-art models, I have experimented with hyper-parameter tuning and reproduced results on standard benchmarks.

RAPYUTA ROBOTICS | Robot Navigation Intern
Oct 2015 - May 2016 | Tokyo, Japan

I developed and extended state-of-art algorithms for Cloud based RGBD SLAM. In order to achieve real time performanc, fine tuned parameters and performed extensive testing on real world environment and datasets. In a team of 4, conducted weekly live demos for potential clients on aerial vehicle obstacle avoidance.

PUBLICATIONS

BOOK "Practical Computer Vision"

"Extract insightful information from images using TensorFlow, Keras, and OpenCV", 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.

CONFERENCE PROCEEDING Abhinav et al., 2015

"Modeling occupancy grids using EDHMM for dynamic environments." Abhinav Dadhich, Nishanth Koganti, and Tomohiro Shibata. In Proceedings of the Conference on Advances In Robotics 2015, p. 60. ACM, 2015.

RESEARCH PROJECTS

MATHEMATICAL INFORMATICS LAB | Masters Thesis
Oct 2013 - Sept 2015 | Ikoma, Japan

While robot navigation is challenging in static world, in dynamic world the limitations and challenges increases many folds for the standard techniques. Under the supervision of Dr. Kazushi Ikeda and Dr. Tomohiro Shibata, presented a novel solution to this problem by utilizing repetitive map generation by a navigating robot to update state of the environment around it. A part of it is published as conference proceeding.

PRESENTATIONS

MACHINE LEARNING KITCHEN Mar 2017 | Tokyo
Talk on "Object Detection Pipeline" utilizing deep learning models.

ABEJA INNOVATION MEETUP Apr 2017 | Tokyo
Talk on "In and Around CNNs" giving overview of CNN and recent state of the art methods.