Abhinav Dadhich

resbyte.github.io abhid@outlook.com

EDUCATION

NARA INSTITUTE OF SCIENCE AND TECHNOLOGY

M.Eng. IN Information Science Oct 2015 | Nara, Japan

INDIAN INSTITUTE OF TECHNOLOGY, JODHPUR

B.Tech. IN ELECTRICAL ENGINEERING June 2013 | Jodhpur, India

SKILLS

PROGRAMMING

Python • C++ Familiar:

Keras • Mxnet • Tensorflow • OpenCV • Docker • Scikit-Sklearn •

Caffe • ROS • PCL

Datasets and Robots:

MNIST • COCO • Pascal VOC • MPII

• TurtleBot • Quadcopter

LINKS

Github:// ResByte LinkedIn:// adadhich Ouora:// Abhinay-Dadhich

COURSEWORK

GRADUATE

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

UNDERGRADUATE

Data Structure and Algorithms Introduction to Programming Signal Processing Digital Electronics and Microprocessor Technology

EXPERIENCE

ABEJA, INC | RESEARCHER

Aug 2016 - | Tokyo, Japan

Within an international team, I am responsible for designing and developing state-of-art Deep Learning models. With experience in data cleansing and data preprocessing, I develop several ML and CV applications to enhance business operations and provide an edge over competitors. I continuously keep in touch with recent research and reproduce results on standard benchmarks. Most frequent tools used are: Pytorch | Keras | Tensorflow | Nvidia-Docker | Opencv | Scikit-Learn

RAPYUTA ROBOTICS | ROBOT NAVIGATION INTERN

Oct 2015 - May 2016 | Tokyo, Japan

- Developed and extended state-of-art algorithms for Cloud based RGBD SLAM.
- Fine tuned parameters for real time performance with 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.

PUBLICATION

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

PROJECTS

MATHEMATICAL INFORMATICS LAB | MASTERS THESIS

Oct 2013 - Sept 2015 | Ikoma, Japan

- Supervisor: Dr. Kazushi Ikeda, Dr. Tomohiro Shibata.
- Problem: Robot navigation in dynamic environments is challenging.
- Solution: Maintain robust map for navigation by incorporating observed changes.
- Over Long periods of working of robots, a large sequential map data is generated. Inferring the hidden states in such sequential data. Working towards Publication

IIT JODHPUR ROBOTICS LAB | Undergraduate Research

Oct 2012 - Feb 2013 | Jodhpur, India

- Developed a Video Tracking system for a general object.
- Implemented Lucas-Kanade method of sparse optical flow in tracking and used SIFT algorithm to detect objects.
- Python is used as working environment with OpenCV libraries. Controller for the system is Beagleboard with ubuntu 11.10.

PRESENTATIONS

MACHINE LEARNING KITCHEN Mar 2017 | Tokyo

Presented a talk on "Object Detection Pipeline" utilizing deep learning models.

ABEJA INNOVATION MEETUP Apr 2017 | Tokyo

Presented a talk on "In and Around CNNs" giving overview of CNN and recent state of the art methods.