# Abhinav Dadhich

resbyte.github.io
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## EDUCATION

### NARA INSTITUTE OF SCIENCE AND TECHNOLOGY

M.Eng. in Information Science
Oct 2015 | Nara, Japan
Average Grade: A; Cum GPA: N/A

### INDIAN INSTITUTE OF TECHNOLOGY, JODHPUR

B.Tech. in Electrical Engineering
June 2013 | Jodhpur, India
Cum. GPA: 7.43 / 10.0

## SKILLS

### PROGRAMMING

Python • C++
Familiar:
Keras • Mxnet • Tensorflow • OpenCV • Numpy • Scikit-Sklearn • Caffe • ROS • PCL
 Datasets and Robots:
MNIST • COCO • Pascal VOC • MPII • TurtleBot • Quadcopter

## LINKS

Github:// **ResByte**
LinkedIn:// **adadhich**
Quora:// **Abhinav-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
- Responsible for designing and developing Deep Learning models for real world tasks.
- Review and enhance existing related technologies and libraries in Deep Learning.
- Familiarity with state-of-art models and follow major conference proceedings.

### 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.

### DEEP LEARNING COMMUNITY | Machine Learning Kitchen

Mar 2017 | Tokyo
Presented a talk on Object Detection Pipeline utilizing deep learning models.