Abhinav Dadhich

resbyte.github.io
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EDUCATION

NARA INSTITUTE OF SCIENCE AND TECHNOLOGY

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

INDIAN INSTITUTE OF TECHNOLOGY, JODHPUR

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

LINKS

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

COURSEWORK

GRADUATE

Mobile Computing
Robotics
Computer Vision
Artificial Intelligence
Ambient Intelligence

UNDERGRADUATE

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

SKILLS

PROGRAMMING

Python • C++ • JAVA •
Familiar:
Robotics Operating System(Package) •Matplotlib • Boost Graph Library • Point Cloud Library • OpenCV • Numpy • Scikit-Sklearn •Android • LaTeX
Robots:
TurtleBot • Robovie MR2 • Quadcopter

EXPERIENCE

KYUSHU INSTITUTE OF TECHNOLOGY | Research Student, Shibata Lab

Supervisor : Dr. Tomohiro Shibata | August 2014 - present | KitaKyushu, Japan

- Problem: Robust mapping for mobile robot navigation in changing environments.
- Aim: Maintain an updated map for robots working for long periods such as weeks.
- Method: Proposed a novel inference approach on occupancy grids to model different dynamic changes in map.
- Implemented inference model for occupancy grids using Explicit-state Duration HMM and tested it on Long term dataset.

PANASONIC | Research Intern

May 2012 - July 2012 | Gurgaon, India

- Delivered an Android application to automate the end to end hospital process.
- App Functions: Interaction with NFC (Near field Communication) tags and saving data at the centralised server
- Team : 3 People, Mentor: Nikhil Nahar | Panasonic Research and Development Centre India

RESEARCH

MATHEMATICAL INFORMATICS LAB | Masters Thesis

Oct 2014 - Present | 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.

EXTRA-CURRICULAR

- Hiking
- NAIST Cricket Club
- Photography Club