Prithvijit Chattopadhyay

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EDUCATION

DTU
Delhi Technological University
B.Tech in Electrical Engineering
2012-2016 | Delhi, India
CPI: 81.30

K.V. GOLE MARKET
Grad. May 2012| Delhi, India

LINKS

Github:// **Prithvijit**
LinkedIn:// **Prithvijit**

UNDERGRADUATE
Advanced Analog Circuit Design
Digital Electronics
Microprocessors
Network Analysis and Control Systems
Pattern Recognition and Machine Learning
(Research Asst. & Teaching Asst)
Electrical Drives

SKILLS

PROGRAMMING
C++ • Python • Matlab • Lua • LaTeX
Shell • Javascript • CSS • PHP

SOFTWARE
Caffe • Torch • Keras • TensorFlow
ROS • PCL • OpenCV • Qt

PUBLICATIONS

- DTU AUV ROBOSUB Journal, AUVSI Journal 2013
- Passive Source Linear Localization Algorithms using Range Approximation methods, IOTA IEEE DTU 2014

ARXIV

- Counting Everyday Objects in Everyday Scenes

RESEARCH INTERESTS

Deep Learning, Computer Vision, Artificial Intelligence, Physics

- My primary motivation is emulate to human brain perception
- I am also interested in making Deep Models interpretable

RESEARCH EXPERIENCE

CVMLP LAB VIRGINIA TECH | Research Assistant
June 2015 – Present | Blacksburg, VA
Working with Prof Devi Parikh and Prof Dhruv Batra, currently visiting researchers at Facebook AI Research, on Semantic Scene Understanding Problems.

- I am working on a project that deals with counting everyday objects in everyday scenes.
- I'm trying to utilise contextual relations between different object classes and compositionality features to help counting and other surrogate tasks such as Detection or Instance Segmentation. Check out our arxiv version

RRC IIIT HYDERABAD | Research Intern
Dec 2014 – Jan 2015 | Hyderabad, INDIA
Worked with Prof K Madhava Krishna. We implemented an efficient strategy for a robot to explore, discover, recognize and navigate to a selected few objects among a number of objects scattered on the floor, based on guess from far and recognize from near strategy.

IACS KOLKATA | Research Intern
Jun 2014 – Aug 2014 | Kolkata, INDIA
Worked with Prof Soumitra Sengupta. My specific focus was looking for Charged Rotating Black Hole Solutions in Einstein-Gauss-Bonnet Dilaton Coupled Gravity. I studied and simulated the conditions for existence of multiple horizons in constant scalar curvature f(R) gravity and acquired results demonstrating the convergence of event and cosmological horizon.

AUTONOMOUS UNDERWATER VEHICLE DTU | Undergraduate Researcher
Aug 2012 – Aug 2016 | Delhi, INDIA
Worked with Prof R K Sinha.

- Underwater Acousitcs : Developed and Implemented Range Estimation Algorithms from TDOA values in conjuction with Machine Vision Techniques.
- Control Systems : Developed control modules to implement simultaneous PID loops to maintain orientation of the AUV.

AWARDS

2013	Semi-Finalists	ROBOSUB - AUVSI
2013	Finalists	NIOT SAVe
2012	Selected	KVPY and INSPIRE Fellowship
2013	National Top 1 percent	INPhO Physics Olympiad