# Priyam Parashar

University of California, San Diego 9500 Gilman Dr La Jolla, CA 92093 U.S.A.

Phone: 412-265-8809 email: pparashar@ucsd.edu Born: July 8, 1991 – India

## AREAS OF INTEREST

Artificial Intelligence • Cognitive Robotics • Human Robot Interaction • Mobile Robots

## **EDUCATION**

2016-Present PhD STUDENT in CSE - Robotics,

University of California, San Diego

2015-2016 PhD Student in Robotics,

Georgia Institute of Technology

CGPA: 3.50 / 4.00

MSc in Robotics,

2016

**Carnegie Mellon University** 

CGPA: 3.95 / 4.00

2013 BTECH WITH HONOURS in Electronics and Communication,

International Institute of Information Technology, Hyderabad

CGPA: 8.55 / 10.00

## RESEARCH EXPERIENCE

GRADUATE RESEARCH ASSISTANT under Dr Henrik Christensen and Dr Ashok Goel,

## University of California, San Diego; Georgia Institute of Technology

- Designing the AI for a "TourBot", intended to give autonomous tours to visitors
- Investigating use of machine learning for repairing/improving existing planners, specifically Hierarchical Task Networks
- Investigating optimal passing policy (distance, speed, human comfort, etc.) and effect of familiarity on the same for service robots while encountering random people in the corridor

2013-2014 GRADUATE RESEARCH ASSISTANT under Dr Reid Simmons,

### **Carnegie Mellon University**

• Designed pipeline for analyzing logged data from mobile robots to model and predict travel time depending upon environmental and time-based features

- Learning was geared towards making explanations and diagnostic efforts easierk by using Decision Tree based rule-extraction from the data
- Verified the pipeline using real-world logged data from CoBot
- Authored a paper outlining the approach and results of the same

ROBOTICS SOFTWARE INTERN supervised by Dr Frederik Heger,

## Vecna Technologies, Inc.

- Programmed the pipeline conceived during the GRA at Carnegie Mellon University for the planning stack of QC Bot in C++
- Experimented with more features for the pipeline using real-time data from in-house robot runs and improved the efficiency by making it more robot specific
- Presented the approach and results as part of final week presentations, which was generally praised
- Undergraduate Research Assistant under Dr Madhava Krishna,

## IIIT-Hyderabad

2014

2013

2011

2016

2012

2011

- Facilitated conception of FPGA-powered omni-directional robots for promoting robotics projects within the university, as a part of team of 4
- Programmed FPGA to implement various path-planning algorithms, leveraging the parallel processing that the platform provides
- RESEARCH INTERN under Dr Sudhir Madhav Rao

### IIIT-Hyderabad

- Designed the complete course curriculum for lab-based course "Digital Signal Processing Lab", which was introduced next semester
- Verified experiments on Texas Instrument's TMS320C6713 DSP Starter Kit and catalogued the proceedings as a lab manual

## TEACHING EXPERIENCE

Teaching Assistant for Introduction to Robotics and Perception

#### Georgia Institute of Technology

• Conducted tutorial sessions to help with lab-based hands-on experiments as well as lecture based conceptual questions

Teaching Assistant for Electronics Workshop - II

#### **IIIT-Hyderabad**

- Designed new weekly problem statements for teaching curriculum
- Supervised lab sessions and tutored the undergraduate students involved

Teaching Assistant for Embedded Hardware Design

#### IIIT-Hyderabad

 Supervised lab sessions and tutored undergraduates on concepts of micro-controllers and FPGA

## **PUBLICATIONS**

Parashar, Priyam, Robert Fisher, Reid Simmons, Manuela Veloso, and Joydeep Biswas. "Learning Context-Based Outcomes for Mobile Robots in Unstructured Indoor Environments." In 2015 IEEE 14th International Conference on Machine Learning and Applications (ICMLA), pp. 703-706. IEEE, 2015

# HONORS AND AWARDS

| 2016      | Georgia Robotics Fellowship for Women and Underrepresented Minorities                     |
|-----------|---|
| 2010-2012 | Enlisted in Dean's List of Academic Excellence at IIIT-Hyderabad, India                   |
| 2011      | Awarded special mention and credits by the institute, for excellent work while developing |
|           | the course curriculum for "Digital Signal Processing Lab"                                 |