

# I G Prasad

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## EDUCATION

Year	Degree/Certificate	Institute	CPI/%
2018-Present	M.Tech (Computer Science & Engg.)	Indian Institute of Technology, Kanpur	8.6/10
2011-15	B.Tech (Computer Science & Engg.)	University Visveswaraya College Of Engineering, Blore	79%
2011	Higher Secondary Certificate(XII)	MPES SDM PU College, Honnavar	89.33%
2009	Secondary School Leaving Certificate(X)	NES English Med School, Honnavar	94.24%

## PROFESSIONAL EXPERIENCE

- **Intern**, Ericsson Global Services India Pvt. Ltd, (May'19-July'19)
- **QA Developer**, Datalicious Pty. Ltd., (Sept'16-Mar'17)
- **Test Associate Engineer**, Dell International Services India pvt. ltd. (Jul'15-Sept'16)
- **Intern**, Dell International Services India pvt. ltd. (Jan'15-Apr'15)

## RESEARCH EXPERIENCE

- **Intelligent Path Planning for Robots**, Guide : Prof. Indranil Saha (Jul'19-present)
  - Performed Literature Survey on existing methods and use of Machine Learning in Path Planning.
  - Evaluated existing Deep Learning Based Path planner to set the benchmark.
  - Implementing a modified Path planner using Reinforcement learning and Deep Learning.
  - Implementing a method to incorporate goal oriented loss and obstacle awareness explicitly.

## RELEVANT PROJECTS

- **Conditional Neural Processes**, Guide : Prof. Piyush Rai (Jan'19-Apr'19)
  - Implemented CNP and surveyed its variants like Neural Processes and Attentive Neural Processes.
  - Proposed a Conditional Neural Net based method for Zero Shot Classification on AWA1 dataset and implemented it.
- **Unsupervised Image Segmentation from Videos**, Guide : Prof. Vinay P. Namboodiri (Mar'19-Apr'19)
  - Implemented state-of-the art W-net architecture for unsupervised segmentation with CRF post-processing.
  - Implemented SLIC based superpixel segmentation to solve Unsupervised Image Segmentation.
- **Formal Methods for Semi-Autonomous Driving**, Guide : Prof. Indranil Saha (Feb'19-Apr'19)
  - Performed literature survey on Human-In-The Loop control Systems.
  - Studied a controller synthesis method for semi-autonomous cars which guarantees the safety of the controller.
- **Content Based Image Retrieval**, Guide : Prof. Vinay P. Namboodiri (Jan'19-Feb'19)
  - Implemented SIFT based image retrieval tool, which retrieves set of images based on query image.
  - Proposed a ensemble based weighted retrieval method which uses SVM, Decision Tree and SIFT features.
- **Envy-Free Allocation**, Guide : Prof. Sunil Simon (Mar'19-Apr'19)
  - Performed literature survey on Envy-Free allocations of indivisible goods.
  - Analyzed various algorithms that gives Envy-Free allocation upto one good for upto 3 agents.
- **Replicated Document Management System**, Guide : Prof. R.K.Ghosh (Aug'18-Nov'18)
  - Implemented a replicated database of documents with guaranteed consistency
  - Demonstrated a practical application where RDMS can be used by implementing GIT type document repository.
- **Empirical Analysis of Supervised Algorithms for Classification**, Guide : Prof. Piyush Rai (Aug'18-Nov'18)
  - Performed evaluation of Classification algorithms like SVM, Decision Trees, Random Forest, KNN, Deep Neural Net etc.

## ACHEIVEMENTS AND AWARDS

- Secured **All India Rank 275** in **GATE 2018** among approximately 1.1 Lakh candidates.
- Qualified entrance exam of **ISRO** in which only top 0.5% of the candidates were shortlisted.
- Received the **Academic Excellence Award** for exceptional academic performance in 2018-19 academic session.
- Received **On The Spot Award** in Dell R&D for developing a simulation framework apart from the regular automation work.

## TECHNICAL SKILLS

- **Programming Languages** : C, C++, Python, Java, C#, ~~ETX~~
- **Software and Libraries** : Git, Tensorflow, PyTorch, Keras, ROS, scikit-learn

## RELEVANT COURSES

Intro to Machine Learning	Probabilistic Modelling & Inference	Probability & Stochastic Processes
Visual Recognition	Algorithmic Game Theory	Maths for ML: Linear Algebra(Coursera)
Formal methods for Robotics	Distributed Systems	Parallel Algorithms

## POSITIONS OF RESPONSIBILITY

- **Teaching Assistant** :
  - Introduction to Computing (Instructor : Prof. Purushottam Kar) (Aug'18-Nov'18)
  - Algorithmic Game Theory (Instructor : Prof. Sunil Simon) (Aug'19-Present)