RKJenamani
Rajat Kumar Jenamani

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Academics

2017-2021	*Bachelor of Technology* in **Computer Science and Engineering, IIT Kharagpur**
GPA	**9.86/10.0** (Currently Pursuing)
2017	*Higher Secondary School Certificate Examination (CBSE)*, **St. Columba's School**
GPA	**97.4%**

Work Experience & Projects

Mar 18-Current — **Arificial Intelligence Team Member:** **Kharagpur RoboSoccer Research Group** **https://github.com/KRSSG**
Guide: Prof. Jayanta Mukhopadhyay
- Research Objective: To build and study cooperative multi-agent systems in dynamic adversarial environments.
- Regularly participates in RoboCup: An international scientific initiative with the goal to advance the state of the art of intelligent robots.
- Created a GUI that integrates the GrSim (Simulator for RoboSoccer SSL) and our fsm architecture based codebase using PyQt and ROS: https://github.com/RKJenamani/robocup-stp/tree/GUI

May 18 — **RRT-Star with APF: Potential Functions based Sampling Heuristic For Optimal Path Planning**
https://github.com/RKJenamani/RRT-Star-With-APF
- Implemented a Potential Function Based- RRT(Rapidly-exploring Random Trees)-Star algorithm for single-query path planning problems that incorporates the Artificial Potential Field algorithm in RRT*.

June 18 — **Role Assignment: A Module for automatic allocation of tasks to bots in a dynamic soccer game enviornment.**
https://github.com/RKJenamani/Role-Assignment
- Implemented a methodology for multiagent robot coordination that consists of a Game Analyzer module that dynamically creates tasks that need to be solved in Robosoccer game situations together with an Assignment Module that automatically assigns tasks to agents optimally.

Scholastic Achievements

- **IITJEE Mains, All India Rank 756:** In top 0.07% amongst more than 11,00,000 students.
- **IITJEE Advanced, All India Rank 2870:** In top 1.5% amongst more than 2,00,000 students.
- **National Entrance Screening Test, All India Rank 8:** In top 0.016% amongst more than 80,000 students.
- **Kishore Vaigyanik Protsahan Yojana SA, All India Rank 298:** National Scholarship Examination held by Department of Science and Technology, Government of India.

Technical Skills

Programming Languages	C | C++ | Python
Libraries and Tools	OpenCV | PyQt | ROS | Numpy | Tensorflow
Field of Interest	Path Planning | Machine Learning | Image Processing | Algorithms

Activities & Leadership

- **Secretary, Code Club, IIT Kharagpur**: A society dedicated to garnering coding skills and shaping IIT Kharagpur's future in the coding arena. Organized up.AI 2018, West Bengal's largest Artificial Intelligence and Machine-Learning summit.
- **Active Member, Quiz Club, IIT Kharagpur**: Responsible for fostering participation and promoting quizzing in IIT Kharagpur.
- **Former Member, Technology Robotix Society, IIT Kharagpur**: Focal point for activities and projects related to robotics in IIT Kharagpur. Created a Lane Following Bot and organized Robotix 2018, one of India's largest robotics events.
- **Former Member, Debating Society, St. Columba's School**

Awards & Achievements

- **Qualified for ACM ICPC 2018 Asia Amritapuri Regionals:** Part of best ranked sophomore team from IIT Kharagpur.
- **Best Fresher, Poles Apart, Kshitij 2018:** Awarded 'Best Fresher' in a Robotics Event at Kshitij 2018, Asia's largest techno-management fest.
- **Participated in Inter-IIT Cultural Meet, 2017**: Part of gold winning Quiz contingent.
- **Awarded a certificate of 'STUDENT PAR EXCELLENCE' by Computer Science and Engineering Department, IIT Kharagpur**

Relevant Coursework

(T)heory and (L)aboratory

Completed	Programming And Data Structures (T/L) | Algorithms I (T/L) | Discrete Structures (T) | Symbolic Logic (T) | Signals and Networks (T)
Currently Pursuing	Switching Circuits and Logic Design (T/L) | Software Engineering (T/L) | Probability and Statistics(T) | Symbolic Logic (T) | Formal Language and Automata Theory(T)
Online Coursework	Machine Learning by Andrew Ng (Coursera) | Deep Learning and Neural Networks (Coursera)