Chirag C Dasannacharya

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EDUCATION

Birla Institute of Technology and Science, Pilani		Rajasthan, India
Bachelor of Engineering in Computer Science	CGPA - 9.51/10	2018 - 2022 (Ongoing)
National Public School, Indiranagar		Bangalore, India
CBSE 12th Board Exam	Score - $96.6%$	2018
CBSE 10th Board Exam	Score - 10.0 / 10	2016

Interests and Skills

Domains of Interest: Graph Theory, Multi-Robot Systems, Distributed Systems, Computer Networks, Programming Languages

Programming Languages and Libraries/Frameworks: C, C++, Python, Java, Elixir, Verilog HDL; NumPy, Matplotlib, QT, Phoenix

Fields in which Courses Taken: Algorithms, Networks, Programming Languages, Compilers, Operating Systems, Object Oriented Programming, Database Systems, Digital Design, Microprocessors, Computer Architecture, Theoretical Computer Science

EXPERIENCE

Backend Development Intern

May 2021 - July 2021 (Ongoing)

Datakrew Pte Ltd

Singapore

- Part of the NTU Singapore's Connect program
- Development and testing of the backend for the MADS platform
- Project is written in Elixir and based on the Phoenix framework

Lab Research Assistant

January 2021 - December 2021 (Ongoing)

INSPIRE Lab, BITS Pilani

Pilani, India

- Studying and proposing strategies for unknown area exploration using multiple robots
- Simulating strategies for multi-robot systems using Player/Stage
- Implementing and evaluating 5 distinct strategies, as well as further variants

Undergraduate Research Intern

May 2020 – July 2020

Bhaskaracharya National Institute for Space Applications and Geo-informatics

Gandhinagar, India

- Implemented algorithms to obtain Land Surface Temperature (LST) from satellite images
- Developed a python plugin for the QGIS platform, using NumPy, GDAL, PyQT and more
- Developed a tool to get statistics on temperature-related data in an area, with estimated LST

AWARDS AND ACHIEVEMENTS

Institute Merit Scholarship (40%)

Mar 2020, Sep 2020, Mar 2021

Awarded to top 3% of students, 3 time awardee

International Linguistics Olympiad 2017 - Bronze Medal Winner

August 2017

Won a bronze medal representing India at the 15th International Linguistics Olympiad held at Dublin, Ireland

International Linguistics Olympiad 2018 - Participant

July 2018

Represented India at the 16th International Linguistics Olympiad held at Prague, Czechia

PROJECTS

Multi-Robot Exploration | Multi-Robot Systems, Path Planning, C++

January 2021 - Present

- Studied and proposed 5 major algorithms to explore unknown areas using multiple robots
- Implemented the algorithms and evaluated their performance
- Explored further using variations in path planning and other subtasks

Networking and System Projects | Networks, File Systems, C

September 2020 - November 2020

- Simulated GFS (Google File System) GFS with metadata server, chunk servers and client mechanisms
- Simulated distributed merge sorting over stream sockets
- Implemented a concurrent TFTP server; developed a terminal shell, with piping and redirects

Graph Isomorphism | Graph Theory

August 2020 – December 2020

- Studied, implemented and presented 2 papers on random graph isomorphism
- Evaluated algorithm performance and explored improvements
- Proposed changes to increase reliability, without affecting time complexity

Interpreter | Programming Languages

June 2020 - Present

- Developed grammar for an imperative programming language, Blaze
- Writing an interpreter for the language, in C
- Implemented scanner, parser and interpretation of functions and namespaces

Extra-Curriculars

ACM Student Chapter - Member

September 2018 - Present

Competitive Exams

Rank 199 - Graduate Aptitude Test in Engineering (GATE) - 2021

Feb 2021

Placed 199 out of more than 102,000 candidates

Rank 1400 - Joint Entrance Exam (JEE) - Advanced 2018

May 2018

Placed 1400th out of more than 150,000 candidates

Rank 775 - Joint Entrance Exam (JEE) - Mains 2018

April 2018

Placed 775th out of more than 1,000,000 candidates

CERTIFICATIONS

Welcome to Game Theory

April 2020

MOOC by Prof. Michihiro Kandori of The University of Tokyo, through Coursera

PERSONAL DETAILS

Interests and Hobbies: Economics, Strategy games, Game development

Languages Spoken: English, Hindi, Kannada, Tulu