Chirag C Dasannacharya

+91-7760391067 | Chirag8CD@gmail.com | ChiragCD.github.io | github.com/ChiragCD

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

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

EXPERIENCE

Backend Development Intern   May 2021 - July 2021 (Ongoing)
Datakrew Pte Ltd   *Singapore*

- Part of the NTU Singapore's Connect program
- Maintenance and development of the backend for the MADS platform
- Project was written in Elixir and was 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 multi-robot systems using Player/Stage
- Implementing and evaluating proposed strategies

Undergraduate Research Intern   May 2020 – July 2020
Bhaskaracharya National Institute for Space Applications and Geo-informatics   *Gandhinagar, India*

- Used remote sensing methods to analyse urban heat islands
- Implemented algorithms to obtain Land Surface Temperature (LST) from satellite images
- Developed a python plugin for the QGIS platform, using NumPy, GDAL, PyQgis, 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 various algorithms to explore unknown areas using multiple robots
- Implemented algorithms and evaluated their performance
- Proposed and implemented new algorithms for the same
- Evaluated proposed methods

Networking and System Projects | *Networks, File Systems, C*   September 2020 - November 2020

- Simulated 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 papers on random graph isomorphism
- Evaluated algorithm performance and explored improvements
- Modified algorithms to increase reliability by reducing input rejection rate, 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