Chirag C Dasannacharya

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

EDUCATION

University of California, San Deigo

California, USA

Master of Science in Computer Science

2022 - (Ongoing)

Birla Institute of Technology and Science, Pilani

Rajasthan, India

Bachelor of Engineering in Computer Science (with distinction)

CGPA - 9.58/10

2018 - 2022

National Public School, Indiranagar

Bangalore, India

CBSE 12th Board Exam CBSE 10th Board Exam Score - 96.6% Score-10.0/10 2018 2016

Interests and Skills

Domains of Interest: Computer Systems, Distributed and Parallel Computing, Cloud Computing

Programming Languages: C, C++, Python, Java, Golang

EXPERIENCE

Nutanix Technologies

Bangalore, India

Intern, Member of Technical Staff

Jan 2022 - June 2022

- Developed features for Nutanix's distributed storage (file servers and object stores)
- Worked on improved integration of the file server with S3 and the Nutanix object store

INSPIRE Lab, BITS Pilani

Pilani, India

Undergraduate Researcher

Jan 2021 - Dec 2021

- Proposed, implemented and evaluated strategies for unknown area exploration using multiple robots
- Work accepted for publication at IROS 2022 (to be held in October 2022)

Nanyang Technological University / Datakrew Pte Ltd

Singapore

Summer Scholar / Industry Intern

May 2021 - July 2021

- Part of NTU Singapore's Connect program
- Development of Datakrew's MADS IoT platform

Bhaskaracharya Institute for Space Applications and Geo-informatics

Gandhinagar, India

Research Assistant

May 2020 - July 2020

- Implemented algorithms to obtain land surface temperature and statistics from satellite images
- Developed a python plugin for QGIS

AWARDS AND ACHIEVEMENTS

Institute Merit Scholarship

Mar, Sep 20, Mar, Sep 21, Mar 22

Awarded to top 3% of students each semester, 5 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

Publications

Multi-Robot Unknown Area Exploration Using Frontier Trees | IROS 2022

October 2022

- Proposed centralized and decentralized algorithms to explore unknown areas using multiple robots
- Implemented simulations for the algorithms and evaluated their performance
- Paper accepted at the 2022 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)

Projects

Systems and Network Projects | Cloud & Distributed Systems, File Systems

Sep 2020 - Present

- Implemented a cloud system, complete with containerization, autoscaling, monitoring, orchestration, etc, and ran services on it
- Implemented GFS (Google File System) with metadata server, chunk servers and client mechanisms
- Implemented distributed merge sorting, a concurrent TFTP server and a terminal shell, with piping and redirects

Interpreter | Programming Languages

June 2020 - Present

- Developed a grammar for an imperative programming language, Blaze
- Implemented scanning, parsing, namespaces and function interpretation

Rectangular Floorplans | Graph Theory

July 2021 - Dec 2021

- Studied strategies to generate rectangular floorplans given rooms and their adjacency relations
- Worked on eliminating separating triangles, identified methods to generate rooms with certain shapes

Graph Isomorphism | Graph Theory

Aug 2020 - Dec 2020

- Studied, implemented and evaluated algorithms for random graph isomorphism
- Proposed improvements to increase reliability, without affecting time complexity

Extra-Curriculars

ACM Student Chapter BITS Pilani - Core Team Member

September 2018 - May 2022

EXAMS

GRE - 334/340

Aug 2021

Quantitative Reasoning - 170/170; Verbal Reasoning - 164/170

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

Feb 2021

Ranked 199th out of 102,000 candidates

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

May 2018

Ranked 1400th out of more than 150,000 candidates

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

April 2018

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

Personal Details

Interests and Hobbies: Strategy games, Economics Languages Spoken: English, Hindi, Kannada, Tulu