# Chirag C Dasannacharya

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# **EDUCATION**

Birla Institute of Technology and Science, Pilani

Bachelor of Engineering in Computer Science

CGPA - 9.52/10

Rajasthan, India  $2018 - 2022 \ (Ongoing)$ 

National Public School, Indiranagar

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

# Interests and Skills

**Domains of Interest:** Systems, Distributed and Parallel Computing, Graph Theory, Multi-Agent Systems

Courses Taken: Cloud Computing, Operating Systems, Computer Architecture, Algorithms, Compilers,

Graph Theory, Networks, Microprocessors

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

#### Experience

#### **Nutanix Technologies**

Intern, Member of Technical Staff

Bangalore, India

(Ongoing) Jan 2022 - June 2022

• Working with distributed file systems

#### INSPIRE Lab, BITS Pilani

Pilani, India

Undergraduate Researcher

Jan 2021 - Dec 2021

- Studying and proposing strategies for unknown area exploration using multiple robots
- Simulating and evaluating proposals

#### 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

Research Assistant

Gandhinagar, India May 2020 - July 2020

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

# AWARDS AND ACHIEVEMENTS

#### Institute Merit Scholarship

Mar 2020, Sep 2020, Mar 2021, Sep 2021

Awarded to top 3% of students each semester, 4 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

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

#### Multi-Robot Exploration | Multi-Robot Systems

Jan 2021 - Dec 2021

- Studied strategies and proposed centralized and decentralized algorithms to explore unknown areas using multiple robots
- Implemented simulations for the algorithms and evaluated their performance

#### Interpreter | Programming Languages

June 2020 - Present

- Developed a grammar for an imperative programming language, Blaze
- Writing an interpreter for the language
- 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 - Present

#### Competitive Exams

# 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: Economics, Strategy games, Game development

Languages Spoken: English, Hindi, Kannada, Tulu