

CHIRAG C DASANNACHARYA

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EDUCATION

University of California, San Diego - Master of Science in Computer Science Sep 2022 – Dec 2023 (Expected)
Birla Institute of Technology and Science, Pilani 2018 – 2022
Bachelor of Engineering in Computer Science (with distinction, CGPA - 9.58/10)

SKILLS AND COMPETENCIES

Programming Languages: C/C++, Python, Java, Golang
Frameworks and Tools: Linux, Docker, Makefiles, Wireshark, GDB; AWS S3, REST APIs
Ongoing Courses - [Advanced Operating Systems](#), [Parallel Computing](#), [Virtualization](#)
Others - [Operating Systems](#), [Computer Architecture](#), [Cloud Computing](#), [Networks](#), [Compilers](#), [Algorithms](#), [Microprocessors](#)

EXPERIENCE

Nutanix (Remote) Bangalore
Intern, Member of Technical Staff | [Distributed Systems](#), [Cloud Storage](#) | C/C++, Python, Go; AWS S3 Jan 2022 – June 2022

- Eliminated operational costs associated with garbage collection and simplified workflows
- Upgraded multi-cloud garbage collection to use AWS S3 lifecycle policies and object versioning
- Integrated an S3 object-based protocol server with the file server to provide S3 access to file storage
- Developed features for cloud storage; worked with distributed file servers, object stores and AWS S3

INSPIRE Lab, BITS Pilani Pilani, India
Undergraduate Researcher | [Multi-Agent Systems](#) | C/C++, Boost, Player/Stage Jan 2021 – Dec 2021

- Proposed strategies comparable to state-of-the-art for multi-robot area exploration, paper accepted at IROS 2022
- Developed solutions for cooperation with limited data in an unreliable communication environment
- Developed methods to ensure coordination, state management and fault tolerance in a decentralized setup
- Worked with path planning (A*, JPS), implemented and simulated strategies using C++

Datakrew / NTU Singapore (Remote) Singapore
Backend Intern / Summer Scholar | [Backend](#); [Agile Development](#) | Elixir May 2021 – July 2021

- Part of NTU Singapore's Connect program, involving Datakrew's MADS IoT platform
- Developed analytics data collection and aggregation flows; wrote tests to improve coverage

PROJECTS

Interpreter | [\(Link\)](#) | [Programming Languages](#), [C programming](#) 2020 –
Developed a grammar and building an interpreter for an imperative programming language

Cloud Orchestration System | [\(Link\)](#) | [Distributed Systems](#), [Network Programming](#) 2021
Built a cloud system with services and containerization, orchestration, autoscaling, monitoring, etc

GFS, Terminal Shell, TFTP, etc | [\(Link\)](#) | [Computer Systems](#), [Networks](#), [C programming](#) 2020 –
Implemented Google File System; a terminal shell with piping and redirects; TFTP server; distributed merge sorting

PUBLICATIONS

Multi-Robot Unknown Area Exploration Using Frontier Trees | IEEE IROS 2022 October 2022 (Upcoming)

ACHIEVEMENTS AND ADDITIONAL EXPERIENCE

BITS Pilani Merit Scholarship - 2020-22 - Awarded to top 3% of students each semester, 5 time awardee
ACM Student Chapter BITS Pilani - 2018-22 - Core Team member
BISAG-N Gandhinagar - Summer 2020 Research Assistant (Wrote a python plugin for QGIS to obtain land surface temperature and statistics from satellite images)
International Linguistics Olympiad - 2017 bronze medal winner and 2018 participant