

Chirag C Dasannacharya

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EDUCATION

Birla Institute of Technology and Science, Pilani <i>Bachelor of Engineering in Computer Science</i>	<i>CGPA - 9.54/10</i>	Rajasthan, India <i>Ongoing - 2018 – 2022</i>
National Public School, Indiranagar <i>CBSE 12th Board Exam</i>	<i>Score - 96.6%</i>	Bangalore, India <i>2018</i>
<i>CBSE 10th Board Exam</i>	<i>Score-10.0/10</i>	<i>2016</i>

INTERESTS AND SKILLS

Domains of Interest: Graph Theory, Computer Networks, Programming Languages
Programming Languages and Libraries: Python, C, Java, Verilog HDL; NumPy, Matplotlib, QT, Pygame

AWARDS AND ACHIEVEMENTS

Institute Merit Scholarship (40%) <i>Awarded to top 3% of students</i>	Mar 2020
International Linguistics Olympiad 2017 - Bronze Medal Winner <i>Won a bronze medal representing India at the 15th International Linguistics Olympiad held at Dublin, Ireland</i>	August 2017
International Linguistics Olympiad 2018 - Participant <i>Represented India at the 16th International Linguistics Olympiad held at Prague, Czechia</i>	July 2018

EXPERIENCE

Undergraduate Research Intern <i>Bhaskaracharya National Institute for Space Applications and Geo-informatics (BISAG-N)</i>	May 2020 – July 2020 <i>Gandhinagar, India</i>
<ul style="list-style-type: none">Used remote sensing methods to analyse urban heat islands in Bangalore and LudhianaImplemented an algorithm to obtain Land Surface Temperature (LST) from satellite imagesIntegrated algorithm into an open-source python plugin for QGIS (geographic information system). Used NumPy, GDAL, PyQgis, PyQt and moreDeveloped a tool to provide statistics on temperature-related data in an area, using LST estimated from the plugin	

PROJECTS

Graph Isomorphism <i>Graph Theory</i>	August 2020 – Present
<ul style="list-style-type: none">Studied and presented a few papers on random graph isomorphismImplemented the papers to evaluate performance and explore improvementsModified algorithms to increase reliability by reducing input rejection rate without affecting time complexityPresented the implementation, modifications and observations	
Blaze <i>Programming Languages, Interpreters</i>	June 2020 – Present
<ul style="list-style-type: none">Developed grammar for an imperative programming languageWriting an interpreter for the language, in CImplemented scanner, parser and interpretation of functions and namespaces	

Networking Projects | *Networks, File Systems, C*

September 2020 - November 2020

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

NR-GANs | *Machine Learning*

September 2020 – November 2020

- Did a literature review on noise-robust methods of image generation
- Studied and presented the paper on [Noise Robust Generative Adversarial Networks](#) (NR-GANs)
- Added functionality to generate images from saved models, train with additional noise distributions, and to mix noise distributions among dataset images for training
- Observed and presented model performance on non-standard noise distributions and mixed distributions

QGIS Plugin | *Software Development, Python*

May 2020 – July 2020

- Implemented an algorithm to calculate Land Surface Temperature (LST) using thermal and infrared band data from Landsat 5 or Landsat 8
- Designed a cross platform GUI for the implementation
- Integrated implementation and GUI with QGIS as a plugin
- Separately packaged tools for statistical analysis of resulting heatmap
- Project done with the objective of analysing urban heat islands, as an intern at BISAG-N

EXTRA-CURRICULARS

ACM Student Chapter - Member

September 2018 - Present

- Set recruitment question paper
- Organised Hour of Code session at local school

COMPETITIVE EXAMS

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: Development economics, Simulating zero player games, Game development

Languages Spoken: English, Hindi, Kannada, Tulu