Rythm Agarwal

B.Tech CSE undergraduate

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Education

Second Year B.Tech Undergrad in Computer Science and Engineering *CGPA- 8.3/10*

Indian Institute of Technology Kanpur *December, 2019*

- **Secured AIR 506 in JEE Advanced, 2018** — *among 2.3 Lakhs candidates*
- **Intermediate, 2017**, Percentage - 94.3 — *Delhi Public School, Dhanbad*
- **Matriculation, 2015**, CGPA - 10 — *Delhi Public School, Dhanbad*

Skills

Languages	C, C++, python, Haskell
Frameworks	Django, PostgreSQL, NumPy
Others	HTML, Git, Linux Shell Utilities, Autodesk

Coursework

- **Fundamentals of Computing**
- **Data Structures and Algorithms**
- **Discrete Mathematics**
- **Linear Algebra and ODE**
- **Computer Organisation***
- **Software Development and Operations***
- **Introduction to Mathematical Logic***
- **Probability and Distribution***
- **Machine Learning* (course offered by Stanford University on coursera.org)**

* : in progress

Experience

Google India* *Virtual Internship*

STEP Intern **Expected to start in May 2020*

- Selected for the STEP intern program, 2020.

Summer Of Code, CSE *IIT Kanpur*

Web Developer *May-July 2019*

- Created a web based platform which was designed to make the entire process of health centre paperless. It had separate endpoints for various departments like reception, doctor, user, pharmacy etc.
- Won the Third prize for best project under Prof. Sandeep Shukla (https://soc.cse.iitk.ac.in/). Sponsored by Nutanix and UPSDC

Projects

Verification app for Post-graduate admission process

Prof. Amey Karkare, CS253, Software Development and Operations *Feb,2020-Ongoing*

- Web-based application to check and verify various documents of candidates applying for post-graduate studies.
- Efficiently distributing work among Teaching Assistants of the department. Aimed to allow Department heads to manage applications easily and securely.

Do Neural Networks Show Gestalt Phenomena?

Prof. Nisheeth Srivastava *Dec,2019-Ongoing*

- Investigating one particular type of Gestalt phenomenon, the law of symmetry, in the context of a feedforward image classification neural network.
- Attempt to find the difference between the network's response to a symmetric figure stimulus versus a non-symmetric but similar stimulus using activations in intermediate layers of the network.

Agent-Based modeling to study stigma around drug use

Prof. Devpriya Kumar *May-July, 2019*

- Used ABM to run simulations to examine agent-environment interaction that shows how an agent may react in the current environment.
- Model based on the Schelling Segregation Model.
- Exploration of various phenomena using the model and subsequently formulation of a hypothesis.

Scrabble-Solver

Programming Club, IIT Kanpur *May-July, 2019*

- Created a Scrabble-Solver in Haskell that worked on command line. Game play was possible for two players as well as machine vs human player.
- Given a set of alphabets and current board status, it would output the highest scoring word.
- Learned to work with purely functional programming language and type inference.

Deep Dive into Competitive Programming

Association of Computing Activities, IIT Kanpur *Jan-April, 2019*

- Learned various techniques like DP, Greedy, BFS, Dijkstra, etc.
- Participated in various coding rounds on Codeforces and Codechef

Responsibility

IIT Kanpur:
- **Secretary, Association of Computing Activities**
- **Company Coordinator, Student Placement Office**