Rochisha Agarwal

Integrated Masters Physics | 3rd year
Indian Institute of Technology, Roorkee

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EXPERIENCE

PROJECT COLLABORATOR | CCSEARCH

July 2020 - August 2020

- Working in the Creative Commons' CC Catalog Frontend repository developed in VueJs.
- Incharge of fixing bugs, feature enhancement, and reviewing pull requests.

UNDERGRADUATE RESEARCH | IIT ROORKEE

July 2020 - August 2020

- Working with Prof. Sugata Gangopadhyay to build a course for Quantum Computing for non Physics students.
- Wrote chapters 'Introduction to Qubits', 'Measurement of Qubits', and 'Single Qubit Gates' for the course on LaTeX with integrated visualizations and code.

UNDERGRADUATE RESEARCH | MU, LONDON

June 2020 - July 2020

- Worked on Quantum Computing Algorithms for Finance with Prof. Nagarajan, which involved initially a literature survey of all the available algorithms in the Finance domain on Portfolio optimization.
- Created an algorithm for 'Stock Picking' on IBMQ.

SUMMER DATA SCIENCE INTERN | CLOOBOT TECHLABS

April 2020 - July 2020

- Worked on a Machine Learning Project, which involved identifying keywords in the set of mails through the Natural Language Processing and the CRF model.
- Single handedly created automated reports in Python for the product Resource Productivity Management..

PROJECTS

ConFusion— *Angular Application*

- Created a Single Page Application for a restaurant name 'ConFusion'.
- Used techniques like routing, promises to create the application.

SKILLS

Programming Languages:
Python, C++, Javascript (Vue, React, Angular)

Packages:
Django, MATLAB, Pandas, Scikit-learn, Qiskit, Pennylane, Cirq, LaTeX, Pytorch, Tensorflow

Utilities:
Git, Linux Shell

Relevant Courses:
Quantum Mechanics, Quantum Computing, Linear Algebra, Data Structures and Algorithms, Ordinary Differential Equation, Analog and Digital Electronics, Applied Optics, Machine Learning (online)

AWARDS & ACHIEVEMENTS

Was selected as **Qiskit Advocate** by IBMQ in September 2020.

VOLUNTEER EXPERIENCE AND LEADERSHIP

NSS, IIT Roorkee — *Event Manager (2018)*

Organized Blood Donation Camp and National Social Summit under National Service Scheme.

TEDxIITRoorkee — *Manager (2019)*

Promoted and managed an event which saw the participation of 250 people and six eminent speakers.

Watch out! IIT Roorkee — *Editor (2018 – Present)*

Worked on several editorials and news pieces in this official student media body. Inform the student populous of the campus about the happenings through articles and videos.