Ashwini Vaishnav

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EDUCATIONAL BACKGROUND :

DEGREE	AWARDING INSTITUTE	DURATION
Bachelor of Science	Central University of Rajasthan	2016-2019
Master of Science	Indian Institute of Technology, Delhi	2020-2022

RESEAERCH EXPERIENCE :

Analysis of Pyramidal Magneto Optical Trap for Producing cold atoms
Duration: Jan 2021 – May 2022
Supervisor: Prof. Bodhaditya Santra, IIT-Delhi
The project was based on modeling, simulation, and characterization of a Pyramidal Magneto Optical Trap for producing cold atoms. The report includes the theory of laser cooling, laser force, dynamics of atoms inside the trap, simulation of the MOT, and the design of Pyramidal MOT.

A simple model of disease spreading
Duration: Jan 2019 – Jun 2019
Supervisor: Prof. Amit Sharma, Central University of Rajasthan
The SIR model is a simple model that theoretically computes the total number of susceptible, infected, and recovered individuals within a closed population over time. The document discusses the mathematical framework and various tools to judge the effectiveness of policies and control methods.

PROFESSIONAL EXPERIENCE :

Physics teacher
Aayaam Career Academy
Duration: Dec 2022 – May 2023
I was in interaction with high school students. My role included, preparing quality study material, seeing students in person, resolving their doubts and difficulties, and keeping track of their progress. My job was also to go to distant villages, explain the importance of education to parents and students and help students find their paths.

AREAS OF INTEREST :

Lasers, Light-Matter Interaction, Charged Particle Optics, Focused Ion Beams, Quantum Optics, Cold Atoms, Atomic and Molecular PhysicS