



Saurabh Gangwar

Date of birth: 04/12/2000

Nationality: Indian

Gender: Male

CONTACT

- Henkestraße 71A, 91052 Erlangen, Germany (*Address*)
- gangwarsaurabh102@gmail.com
- [LinkedIn Profile](#)
- +491634030422 (*WhatsApp*)

About Me Student at FAU studying M.Sc. Physics with a specialization in theoretical physics. Have good knowledge of programming languages, data analysis, and computational physics. Hands-on experience with LaTeX, Python, SQL, Simulation and MATLAB projects. Always strive to learn new skills, take responsibility, and develop a good professional personality.

WORK EXPERIENCE

Internship 12/2020 - 03/2021 New Delhi, India

- University of Delhi
- Completed Internship on theoretical studies on photon and particle accelerator with varying electric field in 3 Months under the guidance of My college Professor Dr. Sahil Dhawan, Assistant Professor, University of Delhi (Used Latex)

Internship 10/2020 - 01/2021 New Delhi, India

- University of Delhi
- Completed Internship on theoretical study of antireflection coating for light absorption improvement in Silicone Solar Cell Project in 3 months under the guidance of My college Professor Dr. Y. Premkumar Singh, Assistant Professor, University of Delhi (Used Ms Excel and SQL)

Student Assistant 03/2023 - 05/2023 Erlangen, Germany

- Friedrich-Alexander-Universität Erlangen, Erlangen, Germany
- Topic- Digital and Signal Process (Used skills: Latex and Matlab with Simulation)

Research Assistant 05/2023 - 12/2023 Fürth, Germany

- Helmholtz-Institut Erlangen

- Topic- Innovative materials and process for photovoltaic energy system and hydrogen as storage and Carrier Medium for CO₂- neutral Energy (Used skills: Latex and Matlab simulation COde)

Project in Machine and Deep Learning *25/10/2022 - 02/02/2023 Erlangen, Germany*

- FAU, Erlangen
- Classification of experimental data from Cherenkov telescope images (Used Python programming with library Keras Image classifier)

Project in Computational Physics *27/10/2022 - 27/01/2023 Erlangen, Bavaria, Germany*

- QAOA for small Max Sat Problem (The Quantum Approximate Optimization Algorithm is a method to solve combinatorial optimization problems on current or near term quantum computers. This project simulate such a QAOA application on a classical computer and after you have completed this step possibly run it on a cloud accessible quantum computer. The example you will work on is a small size maximal satisfiability (Max Sat) problem. (Used Python Programming with Qiskit)

Research Assistant *15/07/2024 - 16/01/2025 Erlangen, Germany*

- FAU, Erlangen
- Topic - Drying kinetics of single droplets
Used the C# and Creation and editing of Python code for image analysis and simulation of drying kinetics. library (HOOMD in Linux) and matplotlib.pyplot, NumPy, PyTorch, Quspin, os, time, and jit in Windows.

EDUCATION AND TRAINING

Bachelor of Science in Physics (Hons) *19/07/2017 - 01/11/2020 New Delhi, India*

- Moti Lal Nehru College (University of Delhi)
- Address: 110021, New Delhi, India
- Field of study: Physics
- Final grade: 7.689 cgpa German grade 2.1
- Number of credits: 180

M.Sc Physics *01/04/2022 Erlangen, Germany*

- Technical faculty, University Erlangen of Nürnberg, 91054, Erlangen, Germany

LANGUAGE SKILLS

- **MOTHER TONGUE(S):** Hindi
- **OTHER LANGUAGE(S):** German (B2) — Sanskrit (B2) — English (C1)

SKILLS

Ms PowerPoint , word, Google colab , Github , Linux , CAD

C++ (use with differential equations in Mathematical Physics with Mathematical model)
Scilab (use in Quantum Mechanics)
Python3 (use in advanced lab courses and Projects)
and MATLAB (Use schematic circuit analog and digital signal Process)
SQL (use in internship with Ms excel)
Data analysis (use in separate Gamma rays Project use keras library in python)
Numerical analysis(Use in Numerical methods lecture)
Simulation (Use in Conjugate Gradient method Project with python) Algorithm (Use in Computational Physics Project)
Terminal bash integrated with VS code , Latex/Overleaf , MS Office 365

SCHOLARSHIP AND SEMINARS

Got Inspire Scholarship *2016 - 2019* All India National Level.

ACADEMIC ACHIEVEMENTS

Qualified IIT JAM Physics Examination. *2020*

Qualified IIT JEE Examination. *2017*

Qualified Heidelberg University interview for M.Sc Physics **2021.**