# Gaurav Dhingra

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# **EDUCATION**

# INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

MASTER OF SCIENCE, BACHELOR OF SCIENCE IN APPLIED MATHEMATICS 2013 - 2018 (expected) GPA: 7.188/10%

### **OPEN SOURCE**

• SymPy • mpmath • LibreOffice

## LINK

Github:// gxyd Web:// gxyd.github.io Twitter:// @axyd0000

#### **COURSEWORK**

Design & Analysis of Algorithms Graph Theory Data Structures Introduction to Linux Statistical Inference Linear Algebra Discrete Mathematics Copyright

# **SKILLS**

#### **PROGRAMMING**

Proficient:

- Python
- Competent:
- C C++ BASH

Familiar:

• JavaScript • MySQL • CSS

#### OPERATING SYSTEM

• GNU/Linux • Windows

#### **TOOLS & FRAMEWORK**

•Vim • Git • Bootstrap

# TALKS

• Lightning talk at PyDelhi 2016

### **EXPERIENCE**

#### SYMPY | Pull Request Manager

September 2017 - Present

#### GOOGLE SUMMER OF CODE 2017 | SYMPY

May 4 - July 22, 2017

- SymPy is a popular python library for symbolic computation with more than 4000 stars on github.
- Worked on extending the computations using the Risch integration algorithm.
- Implemented algorithm for parametric logarithmic derivative problem.
- Trigonometric functions can now be integrated using the Risch algorithm.

#### GOOGLE SUMMER OF CODE 2016 | SYMPY

April 22 - Aug 23, 2016

- Worked on computational group theory.
- Created capability to do computation with Finite Groups and Finitely Presented Groups.
- Representing Finitely Presented Groups, free groups, semi group, free semigroup, and other group related algebraic structures.
- Respective algorithms for the computation of Normailizers, Centeralizer, Center, Order, Subgroups, Orbit etc.

### **PROJECTS**

# SERIES CONVERGENCE, SINGULARITY AND ACCUMULATION BOUNDS IN SYMPY | ACADEMIC PROJECT

May 30 - Aug 21, 2017

Academic Project on implementation of sum and product convergence of series in SymPy, a computer algebra system. Also implemented the Accumulation Bounds for assistance in computation of limits in SymPy.

# FINDING THE LEVEL OF AWARENESS AND ACCEPTANCE OF AYURVEDIC PRODUCTS | Marketing Research

July - November 2015

- Conducted a study with reference to the disruption caused by Patanjali Products in FMCG Markets.
- Tested multiple hypothesis based on analysis of the sample collected.
- Compared the degree to which the respondents perceived ease of use and usefulness of online marketing with demographical questions.
- Relationships among different factors were obtained using chi-square test.