

# Anurag Sahay

## Curriculum Vitae

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### Education

- 2011–2016 **Master of Science (Dual Degree)**, *Mathematics and Scientific Computing*,  
Indian Institute of Technology, Kanpur, *CPI – 7.9*.
- 2011–2016 **Bachelor of Science (Dual Degree)**, *Mathematics and Scientific Computing*,  
Indian Institute of Technology, Kanpur, *CPI – 8.6*.  
Graduated with Distinction; Minors in: (1) Theory of Computing; and (2) Literature

### Research Interests

Additive Combinatorics, Analytic Number Theory, Combinatorial Number Theory, Sieve Theory, Applications to Theoretical Computer Science.

### Project Work

- Jan–Apr '16 **The Hidden Subgroup Problem**, *IITK*.  
Supervised by: Dr. Rajat Mittal, Dept. of Computer Science and Engineering
- Jan–Apr '16 **MS Thesis, Part II: Prime Numbers and Arithmetic Progressions**, *IITK*.  
Supervised by: Dr. Somnath Jha, Dept. of Mathematics and Statistics
- Jul–Nov '15 **MS Thesis, Part I: The Vinogradov Theorem**, *IITK*.  
Supervised by: Dr. Somnath Jha, Dept. of Mathematics and Statistics
- Jan–Apr '15 **Additive Combinatorics and Szémeredi's Regularity Lemma**, *IITK*.  
Supervised by: Dr. Rajat Mittal, Dept. of Computer Science and Engineering
- Jul–Nov '14 **Additive Combinatorics and Incidence Geometry: Kakeya's Problem**, *IITK*.  
Supervised by: Dr. Nitin Saxena, Dept. of Computer Science and Engineering
- Jan–Apr '14 **Arithmetic Progressions in Sets of Integers**, *IITK*.  
Supervised by: Prof. Shobha Madan, Dept. of Mathematics and Statistics
- Jul–Nov '13 **Fourier Analysis on Finite Abelian Groups**, *IITK*.  
Supervised by: Prof. Shobha Madan, Dept. of Mathematics and Statistics
- May–Jul '13 **The Bombieri-Vinogradov Theorem**, *IMSc, Chennai*.  
Supervised by: Prof. R. Balasubramanian, Director and Dr. Sanoli Gun, Reader
- Jun–Jul '12 **Partitions and Rademacher's Exact Formula**, *IIT Delhi*.  
Supervised by: Dr. Amitabha Tripathi, Dept. of Mathematics

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## Awards and Achievements

- 2016 **Ratan Swarup Memorial Prize**, *Indian Institute of Technology, Kanpur*.  
Best all round undergraduate student graduating at the Convocation of IIT Kanpur.
- 2016 **IIT Kanpur Excellence Award for Leadership in Students' Affairs**.
- 2014 **Prof. J.N. Kanpur Prize**, *Department of Mathematics and Statistics, IITK*.  
Best undergraduate/Masters student in the Department of Mathematics and Statistics at the end of the third year (for undergraduates) and first year (for Masters students).
- 2013–14 **Academic Excellence Award**, *Senate Scholarships and Prizes Committee, IITK*.  
Top 10% among students of the Institute in an Academic Year.
- 2013 **Summer Research Fellowship**, *Indian Science Academies*.  
Awarded by IASc, Bangalore; INSA, Delhi; and NASI, Allahabad to do a research project under the guidance of Prof. R. Balasubramanian and Dr. Sanoli Gun at the Institute of Mathematical Sciences, Chennai.
- 2011 **Kishore Vaigyanik Protsahan Yojana (KVPY) SX Fellowship**, *IISc Bangalore*.  
Awarded to 78 (out of about 100,000 applicants) undergraduate students excelling in the fields of science to encourage them to take up research careers as scientists.
- 2008 **NTSE Scholarship**, *National Council of Educational Research and Training*.  
Awarded to the top 1000 high school students in India on the basis of a National Talent Search Examination (NTSE).

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## Research Schools and Workshops

- Summer'14 Summer School in Analytic Number Theory, IHÉS, France
- Summer'13 Science Academies' Lecture Workshop, IMSc, Chennai
- Winter'11 Vijyoshi Camp, IISc Bangalore
- Summer'11 Canada/USA Mathcamp

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## Work Experience

- Sep '16– **Boston Consulting Group**, *Gurgaon, Haryana, India*.  
Associate
- May–Jul '15 **Deutsche Bank (DB Centre)**, *Mumbai, Maharashtra, India*.  
Summer Analyst

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## Positions of Responsibility

- 2014–2015 **Students' Senate**, *Indian Institute of Technology, Kanpur*.  
Chairperson, Students' Senate
- 2012–2015 **Senate Undergraduate Committee**, *Indian Institute of Technology, Kanpur*.  
Students' Senate Nominee
- 2012–2014 **Counselling Service**, *Indian Institute of Technology, Kanpur*.  
(Senior) Academic Mentor
- 2010–2011 **Mathematical Society**, *Delhi Public School, R.K. Puram*.  
Vice President

## Skills

**Languages:** English (Native) | Hindi (Native) | French (Elementary)  
**Programming:** C (Native) | C++ | Python | Haskell (Elementary)  
**Tools:** Django | HTML |  $\text{\LaTeX}$  | MS-Word

## Hobbies and Extra-Curricular Activities

I greatly enjoy reading, especially comic books, fantasy novels and science fiction. I also indulge in programming, word games, crosswords, card and board games, and recreational mathematics, and have a layman's interest in history and mythology.