

# Jiten Ahuja

## Contact Information

Email: jahuja1@lsu.edu

## EDUCATION

### ***Ph.D. in Mathematics***

2019 -

Louisiana State University, A&M

CGPA: 3.802

### ***Master of Science in Mathematics***

2017 - 2019

Indian Institute of Technology, Madras

CGPA: 7.83/10.00

### ***Master of Science (Hons.) in Mathematics***

2013 - 2017

Birla Institute of Technology and Science Pilani

CGPA: 7.92/10.00 | Math Major CGPA: 8.15/10.00

**Thesis:** *Elliptic Functions and Modular Forms* under supervision of [Dr. Pradeep B.](#)

## PROJECTS

### **Category Theory**

Jan - May, 2020

Project under the supervision of [Prof. Milen Yakimov](#)

- Saunders M., Categories for the Working Mathematician; Chapters 1 - 3

### **Introduction to p-adic analysis**

Aug - Nov, 2018

Project under the supervision of [Dr.Dipramit Majumdar](#)

- Katok S., p-adic analysis compared with real, Chapters 1 - 4
- Gouvea F., p-adic Numbers : An introduction; Chapters 1 - 4

### **Algebraic and Fractional Graph Theory**

Jan - Jun, 2018

Project under the supervision of [Dr.Narayanan N](#)

- Godsil and Royle, Algebraic Graph theory; Chapters 1, 2
- Ullman and Scheinerman, Fractional Graph Theory: A Rational Approach to the Theory of Graphs; Chapters 1, 3
- Zoltan Furedi, On the Number of Edges of Quadrilateral-Free Graphs, Journal of Combinatorial Theory, Series B Volume 68, Issue 1, September 1996

### **Analysis**

Aug - Dec, 2016

Project under the supervision of [Dr.Pradeep B](#)

- Folland G B, Real analysis: Modern techniques and its applications; Chapters 1,4,5

### **A study on Decompositions of Graphs**

Jan - May, 2016

Project under the supervision of [Dr.Tarkeshwar Singh](#)

- Bosak J., Decompositions of Graphs; Chapters 1-6

## Prime Number Theorem

Aug - Nov, 2015

Project under the supervision of [Dr.Himadri Mukherjee](#)

- Apostol T., Introduction to Analytic Number Theory; Chapters 1-4,13,14

## TEACHING EXPERIENCE

- Staff at Math Circle Competition Team March, 2021 -
- Math Circle, Research Mentor 28th Jun - 16th Jul, 2021
- [LSU Virtual Math Ready Program](#), TA 7th - 25th Jun, 2021
- MATH 1552 (Calc-2) Grader, LSU Jan - May, 2021
- MATH 1021 College Algebra Instructor, LSU Aug - Dec, 2020
- MATH 1552 (Calc-2) & MATH 2057 (Calc-3) Grader, LSU Jun - May, 2020
- MATH 4200 (Abstract Algebra) Grader, LSU Aug - Dec, 2019
- MATH 4253 (Finite-dimensional Vector Spaces), Grader, LSU Aug - Dec, 2019
- Elementary Real Analysis, Grader, BITS Pilani Aug - Dec, 2016
- Graphs and Networks, Grader, BITS Pilani Jan - May, 2016

## SEMINARS

- **Polynomial Knot Invariants** “*Graduate Topology Seminar*”, LSU Feb, 2021
- **Category Theory** “*Communicating Mathematics*”, LSU May, 2020
- **Topological Proof of Infinitely Many Prime Numbers** “*Graduate Topology Seminar*”, LSU Oct, 2019
- **Introduction to p-adic numbers** “*Weekly Student Seminar*”, IIT-M Nov, 2018
- **Riesz Representation Theorem**, IIT-M Nov, 2018
- **Transcendence of e**, <https://cfs.niser.ac.in/tpm-2017-2/> Jun, 2017
- **Probability of 2 natural numbers chosen at random being co-prime**, MATH-FEST 16 Mar, 2016

## POSITIONS OF RESPONSIBILITY

- Student President of Department of Mathematics for the academic year 2015-16
- Student co-ordinator for the workshop on Number Theory and Cryptography - 15
- Led teams to conduct and successfully complete the annual mathematics festival MathFest - 16, Numbers - 16 and Department fest - 16
- Editor of the annual mathematics magazine Convergence for the issue 2015-16 and authored two articles that were featured in the magazine
- Involved with making of a number of artworks exhibited at BITS-Pilani, K K Birla Goa Campus during 2013-15 as a member of Department of Arts and Deco