

# Ankit Kumar Jaiswal

## Curriculum Vitae

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### Motivation

I'm a **postgraduate in Mathematics** with a strong inclination towards **building automated solutions for decision making** tasks. Therefore, seeking opportunities where I can use my knowledge both in mathematical logic & analysis and computer systems, to come up with models written in emerging languages like Scala which incorporates complementary capabilities of functional and object oriented paradigms, to achieve better goals.

### Education

- 2016 - 2017 **Master of Science in Mathematics**, *Indian Institute of Science*, Bangalore.  
*CGPA – 5.9(out of 8)*
- 2012 - 2016 **Bachelor of Science (Research) in Mathematics**, *Indian Institute of Science*, Bangalore.  
*CGPA – 6.1(out of 8)*
- 2012 **Senior Secondary Examination**, *CBSE*, DAV Public School, Anpara.  
*Percentage – 86*
- 2010 **Secondary Examination**, *CBSE*, DAV Public School Anpara.  
*GPA – 9.4(out of 10)*

### Relevant Courses

Probability and Statistics, Linear Algebra, Algebra, Real and Complex Analysis, Functional Analysis, Differential Equations, Logic Types and Spaces, Homotopy Type Theory

Algorithms and Programming, Automata Theory and Computability, High Performance Computing, Scientific Computing, Machine Learning

### Technical Skills

Programming Language C, Python, Scala

Multiprocessing Tools OpenMP

Formal Systems Agda, Lean

Web Development Tools	HTML, CSS, JavaScript
Shell Scripting	Bash (Linux)
Version Controlling Tool	git, GitHub

## Selected Projects

### ParTEX - parser for formal proofs in a TEX file

2018-present	It is a program written in Scala to parse mathematical papers (in its .tex form) in order to separate the actual mathematics from plain text and use it develop (or train) automated theorem proving
Language	Scala, using parser combinator
Link	<a href="https://github.com/Ankit-Jaiswal/ParTEX">https://github.com/Ankit-Jaiswal/ParTEX</a>
Live Demo	<a href="https://ankit-jaiswal.github.io/partex/tex2web">https://ankit-jaiswal.github.io/partex/tex2web</a>

### Superficial - curves and other structures on surfaces

2016	It is a program written in Scala which identifies simple closed curves over an orientable surface (topology).
Language	Scala
Link	<a href="https://github.com/Ankit-Jaiswal/Superficial">https://github.com/Ankit-Jaiswal/Superficial</a>

### Distributed Learning - a faster ML system

2017	It is an effort towards exploring ways of parallelizing existing ML system and coming up with improvements which is unique to such parallel ML system.
Language	Python
Link	Presentation

## Extra-Curricular Activities and Achievements

- 2019 Qualified GATE in Computer Science being a mathematics graduate.
- 2016 Participated in the Open Day discussion at Maths Dept on AI vs Mathematics.
- 2015 Membered Pravega Finance Committee and managed online registration for workshops through consistent query or grievance redressal, which resulted 20% more registration than the previous year.
- 2014 Coordinated Game Development workshop in IISc during annual fest, Pravega.
- 2013 Demonstrated few UG level Physics experiments to school kids during OPEN DAY at UG Dept.
- 2012 Participated in Alan Turing Centenary Event organised at IISc.