# KISHLAYA JAISWAL

Chennai Mathematical Institute Chennai 603103, IN +91-879-555-4465 kishlaya@cmi.ac.in

**OBJECTIVE** 

Third year undergrad, an avid researcher in most disciplines of science, with focused interests in advanced mathematics and software programming. Continually seeking opportunities to advance knowledge in areas of math, engineering and latest in emerging technology

**EDUCATION** 

High School:

2012 - 15

St. Fidelis College (Percentile 89.8)

Bachelor of Technology (partial):

2015-16

Computer Science & Engineering (Overall GPA 9.9)

Indian Institute of Information Technology

Bachelor of Science (Honours):

2016-present

Mathematics & Computer Science (Current GPA 9.2)

Chennai Mathematical Institute

RESEARCH INTERESTS Algebraic Geometry, Commutative Algebra, Galois Theory, Analytic Number Theory, Topology, Riemann Surfaces, Functional Programming, Algorithms, Machine Learning, Data Mining

COURSEWORK Mathematics: Linear Algebra, Group Theory, Ring and Field, Module Theory, Galois Theory, Commutative Algebra, Lie Group Theory, Representation Theory, Topology, Real Analysis, Complex Analysis, Riemann Surfaces, Calculus, Differential Equations, Probability Theory, Measure Theoretic Probability, Analytic Number Theory

> Computer Science: Functional Programming (Haskell), Advance Programming (Python), Discrete Mathematics, Design and Analysis of Algorithms, Theory of Computation, Programming Language Concepts, Implementation of FP Languages, Data Structures, Computer Organization

Physics: Classical Mechanics, Basic Electronics, Electrical Circuit Analysis, Digital Design

Others: Linguistics, English, Environmental Sciences

TECHNOLOGY **SKILLS** 

Programming Languages: Haskell, Julia, Python, Javascript, Mathematica

Operations Technologies: AWS, Docker, CI/CD

Web Backend Technologies: NodeJS, MongoDB, PostgreSQL, Redis, Sendgrid, Mail-

Trap, SocketIO, HAProxy

Web Frontend Technologies: Elm, ReactJS, Bootstrap, SASS/SCSS, Gulp, Bower,

NodeJS, CoffeeScript, Google Poylmer Typesetting Systems: XML, LATEX

#### **EXPERIENCE**

Julia Intern

June 2018 - Present

AimsQuant, Delhi

• Integrated fundamental data stock for extending financial research operations

Haskell Intern

May 2018 - July 2018

Vacation Labs, Goa

- Built a real-life customer-facing project in Haskell
- Introduced Elm into the tech-stack as a side effect

Backend Engineering Intern

June 2017 - July 2017

AimsQuant, Delhi

- Developed forward testing of investment strategies
- Created a backend request scheduler
- Integrated IJulia/IPython interactive notebook in the web-app to facilitate interactive financial research

# HONORS AWARDS

Kishlaya's Identity

Published a new mathematical result

State Level Qualifier

Regional Mathematical Olympiad 2013

Gold Medalist

SOF's International Mathematical Olympiad

SOF's National Cyber Olympiad

Silver Medalist

SOF's National Science Olympiad

#### COMMUNITY SERVICE

Web Dev College Tech 2015 - 2016

• Developed college website

 $Problem\ Writer$ 

2014 - 2016

- Proofathon
  - Helped to create online mathematical contest for high school students
  - Contributed to problem writing and website development

### EXTRA-CURRICULAR ACTIVITIES

Teaching Assistant

January 2018 - April 2018

Functional Programming in Haskell by NPTEL (National Programme on Technology Enhanced Learning)

Teaching Assistant

January 2018 - April 2018

Advanced Programming, instructed by Prof. Samir Datta

Teaching Assistant

August 2017 - December 2017

Programming in Haskell, instructed by Prof. S P Suresh

Adventures of The Mind

August 2015

Achievement-focused mentoring camp for the most promising high school students Got selected and sponsored by Brilliant.org