# Milind Hegde

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#### Education

2012 - Present

# Bachelor of Science, Indian Institute of Science, Bangalore

Major in Mathematics, expected to graduate in May 2016. In the top 2 of the mathematics majors group of 21.

Latest Term GPA: 7.8/8

Cumulative GPA: 7.6/8

Has taken and excelled in advanced mathematics courses including measure theory, probability theorey, stochastic processes, functional analysis, algebraic topology, real & complex analysis, commutative algebra, Galois theory, representation theory.

## **Exam Scores**

GRE (General)

Verbal 170/170 (99 percentile)

Quantitative 170/170 (98 percentile)

Analytic Writing 5/6 (93 percentile)

GRE Subject (Mathematics)

Scaled Score: 890/900 (95 percentile)

TOEFL

Reading 30/30

Listening 30/30

Speaking 30/30

Writing 28/30

# **Research Experience**

August 2015 -

#### Final Year Research Project, IISc

Present

- Studying harmonic analysis, singular operators, and the Fock space.
- Working on an open problem regarding the boundedness of a certain class of integral operators on the Fock space (see Integr. Equ. Oper. Theory 81 (2015), pg. 451–454.)
- Under the guidance of Prof. S. Thangavelu.

June 8 – July 9,

#### Participant in Visiting Students' Research Programme, TIFR, Mumbai

2015

- Studied algebraic number theory under the guidance of Prof. Sandeep Varma.
- Gave a twenty minute talk titled *The Sign of the Gauss Sum*.

May 5 – June 19,

#### Research Project, IIT-Bombay

2014

- Studied graph theory, extremal combinatorics, and the Complete Intersection Theorem.
- Worked on a conjecture in extremal graph theory and made some headway.
- Under the guidance of Prof. Niranjan Balachandran.

Summer 2013

#### Summer Project at Physics Department, IISc

 Studied fluid mechanics and the Plateau-Rayleigh Instability under the guidance of Prof. Arnab Rai Choudhuri.

# Other Experience

## 2015 App Coordinator, *Pravega*, IISc's Science and Technology Festival

• Was responsible for and coordinated the development of the Pravega map with an external developer.

# 2014 Editorial Coordinator & Designer, Quarks Magazine, IISc UG

- Managed the editorial team and coordinated with other teams to bring out the magazine successfully and on time.
- Designed 3 articles in full, and was heavily involved with overall typography and typesetting of the magazine.

#### 2013 Editor, Quarks Magazine, IISc UG

• Selected for skill in writing, composition, editing. Further contributed to the magazine by ensuring that typographic rules were followed throughout.

#### 2013 Core Committee Member, Pravega

Tasked with major aspects of the fest, including website, design, events, and its founding.

• Was personally responsible for Pravega's General Quiz and complete website.

#### Head of Web Team, Pravega

Responsible for every aspect of the website (pravega.org/pravega2014), such as designing, coding, and administration. In particular,

- Implemented a login system with industry-standard cryptographic practices.
- Learnt PHP and MySQL for the purpose.

# 2013 Web Designer of IISc UG Website

Designed and coded the IISc UG website (iisc.ernet.in/ug).

## 2013 Typesetter, Scipher, IISc UG Mock KVPY Exam

Typeset the entire Scipher question paper for both the SA and SX question papers.
Learnt to use LaTeX to write equations, chemical structures, physics diagrams.

# Skills & Strengths

Programming	Has experience programming in several languages, including C, C++, R,
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Matlab, JavaScript, PHP.

**Software** Comfortable with Microsoft Word, Excel, PowerPoint, Adobe InDesign, Adobe

Photoshop, Mathematica, Matlab, R, LaTeX, among others.

Typesetting, Sensiti Design, Typography all des

Sensitive to font choice, spacing, placement and arrangement of text, and overall design choices of documents.

## **Honours & Achievements**

#### 2013, 2014 ACM ICPC

Qualified to the national level of the ACM ICPC, a prestigious international programming competition, of which approximately ten teams qualify to the international finals.

#### 2012 KVPY Fellow

Awarded KVPY Fellowship through the SX Stream.

#### 2012 CBSE Group Mathematics Olympiad (GMO) Awardee

Qualified the GMO to write the INMO (Indian National Mathematics Olympiad). Among 6 selected from across the country's CBSE schools.

#### 2012 Best Outgoing Student

Honoured with the title of best outgoing student out of the 100-strong 2012 batch at Sri Kumaran Children's Home.