INDRAPRASTHA INSTITUTE of INFORMATION TECHNOLOGY DELHI

# Tenure Track Faculty Positions In Center for Applied Mathematics at IIIT-Delhi

www.iiitd.ac.in/careers/faculty/2016

# About IIIT-Delhi:

IIIT-Delhi (Indraprastha Institute of Information Technology, www.iiitd.ac.in) is an Autonomous Institute created by Govt. of Delhi with a mission to become a world class R&D led Institution in IT and interdisciplinary areas. It offers one of the most vibrant and exciting academic environments in India and is an ideal place for a young researcher who wishes to work in India in these exciting times. It has over 60 faculty members, all holding PhD from US, Europe, Singapore and has built strong research groups across the world in many areas.

### How to Apply?

For applying, send an email with your CV with names of at least three references, a research statement and a teaching statement indicating the core and advanced courses of interest to: <u>faculty-applications@iiitd.ac.in</u>

Please put the subject as "Faculty Position in Mathematics at IIIT-Delhi".

# **Eligibility:**

A candidate should have a PhD from a top Institution in India or abroad in Mathematics, Statistics, Operation Research or relevant areas of Computer Science/ Computational Biology/ Electronics Engineering, a good research record, and show future potential.

We seek candidates working in specified areas of Mathematics allied to Computer Science, Electrical Engineering or Biology, have the capability to build a strong research program, and provide innovation and quality teaching at both the undergraduate and postgraduate levels.

# Schedule:

**For applying:** Anytime - applications are processed regularly.

**Technical Seminar:** On a mutually convenient date; often when the candidate is visiting India. E-seminar also possible.

**Interaction with Selection Committee:** Held regularly every few months. Interaction on Skype also possible.

### About the Center for Applied Mathematics at IIIT-Delhi

The center will have two broad goals:

- Have a world-class research program in the areas of Mathematics allied to Computer Science, Electrical Engineering as well as Biology.
- Engage actively with industrial partners in collaborative research and in identifying, abstracting and solving problems of relevance to industry and society.

The center aims to support interdisciplinary undergraduate and graduate programs in conjunction with the Computer Science and Electrical Engineering departments as well as running a PhD program in Mathematics.

The following two highly respected academicians have agreed to be the mentors and advisors for the Centre for Applied Mathematics: **Prof. Rajeeva Karandikar**, Director, Chennai Mathematical Institute and **Prof. Govindan Rangarajan**, Professor of Mathematics, IISc Bangalore.

#### **Areas of Interest**

The Center for Applied Mathematics at IIIT-Delhi is looking for tenure-track faculty in the following areas:

- Optimization: All areas of Optimization including Linear/ Non-Linear/ Integer/Dynamic/ Mathematical Programming, Combinatorial /Stochastic Optimization, Heuristics, etc.
- **Statistics and Data Science:** Probabilistic Modeling, Statistical Learning, Monte Carlo Methods, Stochastic Processes, Information Theory, Deep Learning, etc.
- **Network Science:** Graph Theory, Networks, Statistical Physics, etc.
- **Scientific Computing:** Numerical Methods, Finite Element Techniques, Differential Equations, etc.
- **Other areas:** Algebra and Coding Theory, Number Theory, Control Theory, Combinatorics, Modeling, Mathematical Finance, etc.

The strong candidates in other areas will also be considered primarily.

#### Research, Innovation, and Development

The Institute puts strong emphasis on research, innovation and development to create impact through published papers, projects and technology development. It strongly focuses on graduate education via the PhD program (various policies to attract PhD students have already yielded more than 100 scholars in seven years). It also extends significant support for initial career development via initiation research grant, support for international conference travel, professional society membership and encouragement of continuing collaborations with foreign partner institutions (with options for short-term leave support). It has implemented systems of yearly appraisal/feedback and a tenure process to help faculty members aim high and create an institute whose reputation is benchmarked against international standards.

# Education

The Institute has a 4-year BTech program in "Computer Science and Applied Mathematics", a PhD program in Mathematics and an option for "Minor in Mathematics" for BTech (CSE) and BTech (ECE) students. It also plans to launch a focused/specialized MTech/Masters program in Applied Mathematics. Faculty members will be expected to teach core courses in Mathematics for the undergraduate programs, as well as electives and advanced courses for the undergraduate as well as postgraduate programs.

#### **Compensation and Quality of Life**

The institute provides a compensation (CTC) of over Rs. 1.50 lac/month for a starting Asst. Prof. (to be revised based on 7th pay commission) and allows a faculty member to supplement it through research grants, summer sabbaticals in R&D labs/companies, consultancy, etc. The campus is located at Okhla Phase-III, with a Metro station within  $\frac{1}{2}$  km, with modern, good quality and spacious accommodation for faculty.