

## Address

CNeRG Lab,  
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# Unnikrishnan T A

## Junior Research Fellow | IIT Kharagpur, India

## Work Experience

- 07/16 - Now **Junior Research Fellow** IIT Kharagpur  
Working on medical data analytics- trying to build a remote health care delivery system that is capable of disease classification and identifying disease progression.
- 11/12 - 09/13 **Associate Software Engineer** Accenture, Bangalore, India  
Green Field Training(GFT) specializing in Core Java and JEE concepts covering the basics of JSTL, AJAX, Spring, HTML, MySQL etc. Worked for BestBuy Application Capability Management focusing on their supply chain management system. The primary skill used in the project was 'Yantra', by Sterling Commerce Corporation, presently part of IBM Sterling Supply Chain Solutions. Attended IBM's training on 'Sterling Order Management 9.1'.

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## Programming

Python ★★★★★  
Java ★★★★★  
C ★★★★★  
Android ★★★★★  
Latex ★★★★★

## Social/Web Presence

Stack Overflow  
500px  
Facebook  
Twitter

## Areas of Interest

Complex Networks  
Social Networks  
Information Retrieval  
Data Mining

## Projects

- 09/15 - Now **Social Relationship Management Strategies** (Social Networks, Machine Learning, NLP)  
SRM tools are used by different companies to better manage their social media presence. They often prioritize the incoming posts based on a ranking function and reply to them based on this ranking. The challenges in improving the performance of an SRM tool will thus include modeling of a ranking function, managing the bursts in arrival rate and also the clustering of *near similar* tweets. Collaboration project with Flipkart Data Science team. Mentor: Prof. Niloy Ganguly, Samik Datta (Flipkart)
- 02/15 - 10/15 **Anatomy of Large Scale e-Commerce Promotional Events** (Social Networks, Complex Networks, NLP)  
Investigates the structure of conversation-graphs on *Twitter* that emerge from the *hot-and-short* large-scale online promotional events. The evolution of new community structures, user movements between communities during the event window and the role of influential users in the final sentiment propagation are some of the interesting observations. Industry collaboration with Flipkart Data Science team. Mentor: Prof. Niloy Ganguly, Samik Datta (Flipkart)
- 08/14 - 11/14 **Centrality Ranking in Multiplex Networks** (Complex Networks)  
Betweenness Centrality is a popular measure of importance of a node in a network. In this project, we tried to reproduce the results explained in their paper by *Albert Solé-Ribalta et.al* for the calculation of Betweenness Centrality by extending *Brandes Method* to account for the multiplexed network structure. Academic project for Social Computing course, IIT Kharagpur.

## Publications

Binny Mathew, Unnikrishnan T A, Tanmoy Chakraborty, Niloy Ganguly, Samik Datta - "Mining Twitter Conversations around E-commerce Promotional Events", *CSCW 2016 Posters*.

## Relevant Courses Taken

Social Computing  
Complex Networks  
Computational-Complexity  
Advanced Graph-Theory (audit)  
Data Mining  
Combinatorics  
Applied Computer-Vision

## Languages

English ★★★★★  
Malayalam ★★★★★  
Hindi ★★★★★  
Sanskrit ★★★★★

## Education

2014 - 2016	<b>M. Tech in Information Technology</b> Department of CSE, IIT Kharagpur.	CGPA- 8.63/10
2008 - 2012	<b>B. Tech in Computer Science &amp; Engineering</b> <b>FISAT</b> - Federal Institute of Science & Technology, MG University, Kottayam, Kerala	Aggregate - 73.9 %
2006 - 2008	<b>Higher Secondary Education in Computer Science</b> <b>BHSS</b> - Brahmanandodhayam H.S.S. Kalady, Kerala	Aggregate - 96.8 %
2006	<b>SSLC</b> <b>BHSS</b> - Brahmanandodhayam H.S.S. Kalady, Kerala	Aggregate - 94.4 %

## Scholastic Achievements

Second best course project award for Flipkart's course project evaluations, Complex Networks course, Spring 2015, IIT Kharagpur.

Team member in one among the 8 teams who made it to the finals of Flipkart Hack Day 2015, IIT Kharagpur. Theme: "Make in India" - the teams were asked to develop an android app based on the theme.

First place in Paper Presentation in Tathva '11, National level technical symposium held at National Institute Of Technology, Calicut in October 2011.

First place in Paper Presentation in Excel 2011, National level technical symposium held at Govt. Model Engineering College, Ernakulam in September 2011.

Second place in Technical Projects Exhibition in the Second National Technological Congress, Kerala held at Government Engineering College, Trichur in January 2012.

## Teaching Assistance

Co-mentor in Complex Networks course 2016 Spring, IIT Kharagpur. Projects: When the lolcats meet the Philosoraptors - A study on the dynamics of image memes, Deep learning for phrase representations - An RNN Encoder-Decoder approach.

Teaching Assistant in Systems Design Lab during 2015 Autumn semester, IIT Kharagpur. Mentored a team of six members in various phases of developing an android app right from requirement analysis to development.

Co-Mentor in Smart-phone Computing course 2015 Autumn semester, IIT kharagpur.

## Extra Carricular Achievements

Co-Founder and Chief Photographer at Pix2 Media, a professional photography service group initially located in Kochi, Kerala.

Was one of the official photographers of FISAT during my academic period 2011-12 and headed a photography team covering all major events that took place in that time period.

## References

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