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## Personal Information

Name Vishwas Kukreti  
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## Research Interest

My research interests lie in the dynamics of complex system, especially, in the behaviour of complex socio-economic systems during phase transitions. I spend considerable amount of my time on BI/ML problems as a side project.

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## Education

July 2017 – Present **Jawaharlal Nehru University**  
**Ph.D.** in Complex Systems  
July 2015 – July 2017 **Jawaharlal Nehru University**  
**M.Sc.** in Complex Systems  
Aug 2011 – June 2014 **University of Delhi**  
**B.Sc(Honours)** in Physics

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## Publications

Oct 2019 **Identifying the global terror hubs and vulnerable motifs using complex network dynamics**  
SS Husain, K Sharma, V Kukreti, A Chakraborti  
*Physica A: Statistical Mechanics and its Applications*, 123113

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## Academic Experience

### Teaching Experience

May 2019 **Teaching Assistant**  
Agent-Based Modelling module  
Dynamics of Complex Systems-2019  
International Centre for Theoretical Sciences, Bangalore  
Nov 2018 **Instructor**  
Workshop on R and network science  
Mathematical & Computational Empowerment Cell, JNU  
Dec 2017 - July 2018 **Teaching Assistant**  
Multi-agent Modelling of Complex Systems (IT-462)  
School of Computational & Integrative Sciences, JNU

### Projects

Dec 2016 - July 2017 **Master's dissertation**  
Re-implementation of Burrows-Wheeler Transformation for genome wide sequence data compression and identifying factors affecting its efficiency  
Prof. Ahmad, sciWhy Lab, JNU

June 2016 - July 2016 **Summer Project**  
Employment and Unemployment Situation in Uttarakhand  
Dr. Manoj Pant, Directorate of Economics & Statistics,  
Government of Uttarakhand

### Talks

- Aug 2019 **Quantifying mesoscopic structure dynamics in stock market using eigenvector centrality and structural entropy**  
One-day Symposium on Complex Systems  
Jawaharlal Nehru University
- July 2018 **Identifying the global terror hubs and vulnerable motifs using complex network dynamics**  
Benemérita Universidad Autónoma de Puebla (BUAP), Mexico
- July 2018 **Identifying the global terror hubs and vulnerable motifs using complex network dynamics**  
RMT, Complex Networks and Applications seminar  
Centro Internacional de Ciencias,  
Universidad Autónoma del Estado de Morelos (UAEM), Mexico

### Academic visits

- May 2019 - July 2019 **Participant**  
Summer research program on Dynamics of Complex Systems  
International Centre for Theoretical Sciences, Bangalore
- July 2018 - Aug 2018 **Speaker**  
Statistical techniques for correlation analysis: Quantum Many-Body Systems and more  
Centro Internacional de Ciencias,  
Universidad Autónoma del Estado de Morelos (UAEM), Mexico
- July 2018 **Speaker**  
Benemérita Universidad Autónoma de Puebla (BUAP), Mexico
- June 2018 **Participant**  
THATCamp - The Humanities and Technology Camp  
Université Grenoble Alpes, France
- Oct 2017 - Nov 2017 **Visting scholar**  
Chennai Mathematical Institute  
Chennai

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### Work Experience

- March 2018 – Present **Intern Data Analyst**  
*Dono Consulting*  
Creating customised end-to-end data based solutions
- Oct 2017 – Feb 2018 **Intern**  
*capSwipe*  
Creating NLP based chatbots

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### Extracurricular

- Oct 2019 Initiator, Competitive Programming Cell at School of Computational & Integrative Sciences, JNU
- Sep 2019 - Present Member of Jawaharlal Nehru University Students Union (JNUSU)
- July 2018 Organizing Member of RMT, Complex Networks and Applications seminar, Universidad Autónoma del Estado de Morelos (UAEM), Mexico

Nov 2017 Organizing Member of ECONOPHYS-2017 & APEC-2107,  
Jawaharlal Nehru University jointly with University of Delhi

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## Skills

### Technical skills

**Languages** Python, R, MATLAB, HTML

**Scientific softwares** Tableau, Cytoscape, OpenRefine, Gephi

**Methodologies** Machine Learning, Neural Nets, Graph Theory, Time series analysis, Agent based modeling

Knowledge of Git, Linux, Latex

### Personal skills

Team player

Good analytical skills

Sociable and proactive

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## Languages

Garhwali, Hindi *Native*

English, *Fluent*