

# Dr. Dinesh Kumar

## Personal Information

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### Dr. Dinesh Kumar

Assistant Professor,  
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## Areas of Interest

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Cloud Computing (Cloud Economics, Resource Provisioning and Scheduling), Internet of Things (Resource management), Distributed and Parallel Systems, Game Theory and Mechanism Design

## Academic Experience

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- 1. Motilal Nehru National Institute of Technology, Allahabad, U.P., India**  
**Assistant Professor**, Department of Computer Science and Engineering  
**Period:** 21<sup>st</sup> June, 2019 – till date
- 2. Pandit Deendayal Petroleum University, Gandhinagar, Gujarat**  
**Assistant Professor**, Computer Engineering, School of Technology  
**Period:** 10<sup>th</sup> September, 2018- 20<sup>th</sup> June, 2019  
**Subjects Taught:** Distributed Systems, Wireless Communication and Mobile Computing

## Education

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### PhD Computer Science:

**School of Computer and Systems Sciences, Jawaharlal Nehru University, New Delhi**  
**Topic of the Thesis:** *Designing and Analysis of Auction based Resource Provisioning Models in Cloud Computing*  
**Thesis Supervisor:** Dr. Zahid Raza  
**Period:** July 2014 – August 2018

### M.Tech. (Computer Science and Technology):

**School of Computer and Systems Sciences, Jawaharlal Nehru University, New Delhi**  
**Topic of the Dissertation:** *Scheduling of VM Resources in Cloud Computing using PSO*  
**Dissertation Supervisor:** Dr. Zahid Raza

**Period:** Aug 2012 – July 2014  
**Final Grade Points:** 7.78/9.0 (82.80%)

**B.Tech (Computer Science and Engineering):**

**Career Institute of Technology and Management (CITM), Faridabad, Haryana**  
**Period:** Aug 2008 – July 2012  
**Final Grade Points:** 70.83%

**Intermediate:**

**Yaduvanshi Shiksha Niketan, Mahendergarh, Haryana, India**  
**Period:** July 2006 - June 2008  
**Final Grade Points:** 88.40% (With Honour and Distinction in Mathematics, Physics, Chemistry)

**High School:**

**H.C.M. Vaidik High School, Mahendergarh, Haryana, India**  
**Period:** July 2005 - June 2006  
**Final Grade Points:** 9.4/10

**Books**

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1. Gaurav Baranwal, **Dinesh Kumar**, Zahid Raza, Deo Prakash Vidyarthi, "Auction based Resource Provisioning in Cloud Computing ", Springer Briefs in Computer Science, Springer, 2018, ISBN 978-981-10-8737-0, doi:10.1007/978-981-10-8737-0.

**Research Papers**

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**Publications in International Journals**

1. **Dinesh Kumar**, Gaurav Baranwal, Zahid Raza, Deo Prakash Vidyarthi, "A Truthful Combinatorial Double Auction Based Marketplace Mechanism for Cloud Computing", Journal of Systems and Software, Elsevier, Volume -140, pp. 91-108, 2018. (SCIE Indexed), **Impact Factor: 2.278**.
2. **Dinesh Kumar**, Gaurav Baranwal, Zahid Raza, Deo Prakash Vidyarthi, "A Survey on Spot Pricing in Cloud Computing ", Journal of Network and Systems Management, Springer, Volume 26, No. 4, pp. 809-856, 2018. (SCIE Indexed), **Impact Factor: 1.588**.
3. **Dinesh Kumar**, Gaurav Baranwal, Zahid Raza, Deo Prakash Vidyarthi, "A Systematic Study of Double Auction Mechanisms in Cloud Computing", Journal of Systems and Software, Elsevier, Volume-125, pp. 234-255, 2016. (SCIE Indexed), **Impact Factor: 2.278**.
4. Gaurav Baranwal, **Dinesh Kumar**, Zahid Raza, Deo Prakash Vidyarthi, "A Negotiation based Dynamic Pricing Heuristic in Cloud Computing ", International Journal of Grid and Utility Computing, Inderscience, Volume-9, No. 1, pp. 83-96, 2018 (Scopus Indexed).

### **Publications in the Proceedings of the International Conferences**

1. **Dinesh Kumar**, Zahid Raza, “**A PSO based VM Resource Scheduling Model for Cloud Computing**”, Proceedings of IEEE International Conference on Computational Intelligence & Communication Technology (ICICI), 2015, pp. 213-219.
2. **Dinesh Kumar**, Gaurav Baranwal, Zahid Raza, Deo Prakash Vidyarthi. “**Fair Mechanisms for Combinatorial Reverse Auction based Cloud Market**”, Proceedings of 3<sup>rd</sup> International Conference on Information and Communication Technology for Intelligent Systems (*ICTIS*), 2018.

### **Invited Talks/Expert Lectures**

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1. Delivered expert lecture on “**Simulate Cloud with CloudSim**” at Dharmsinh Desai University Nadiad, Gujarat on 5<sup>th</sup> April, 2019 during Short-Term Training Programme On “Linux Usage, Administration and Open Source Software”.

### **Workshop/Conference Organized/Attended**

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1. 6-day Faculty Enablement Program on “**LEX based Foundation Program**” conducted by Infosys Limited during January 18<sup>th</sup> -25<sup>th</sup> 2019.
2. “**Two Days Workshop on Simulations of Wireless Communication Systems using OCTAVE**” organized by Nirma University, Ahmedabad, Gujarat, January 19-20, 2019.
3. “**Workshop in Cloud Computing on Aneka Platform**”, organized by SC&SS, JNU, New Delhi, on December 15, 2018.
4. “**Winter School on 5G Communications**” organized by DAIICT, Gandhinagar, Gujarat, December 07-08, 2018.
5. Organized Two-day workshop on “**Server-side Scripting Language with SEO**” at Central University of Haryana during 23-24 April 2018.
6. “**International Research Workshop on Cloud Computing (RWCC-2016)**” organized by JNU New Delhi, December 22-23, 2016.
7. “**International Research Workshop on Cloud Computing (RWCC-2015)**” organized by JNU New Delhi, December 22-23, 2015.
8. “**International Mini Workshop on VLSI Systems**” organized by JNU New Delhi, January 12-13, 2015.
9. “**International Research Workshop on Cloud Computing (RWCC-2014)**” organized by JNU New Delhi, September 26-27, 2014.

### **Extra-Curricular & Achievements**

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1. Participated in poster presentation on “**National Science Day 2015**”, organized by JNU New Delhi Sponsored by DST, Govt. of India, February 28, 2015.
2. Participated in Computing Quiz at Inter University Competition organized by ACM Delhi-NCR Chapter on April 6, 2013.

3. Got Junior Research Fellowship by University Grant Commission, INDIA.
4. Qualified **UGC-NET-JRF** exam in Computer Science discipline held in December 2012
5. Qualified **GATE 2013** in CS&IT with **AIR - 927**.
6. Presented the paper in “**IEEE International Conference on Computational Intelligence & Communication Technology (ICICI)**”, 2015.
7. Presented the paper in “**3<sup>rd</sup> International Conference on Information and Communication Technology for Intelligent Systems (ICTIS)**”, 2018.
8. Got Scholarship from CBSE under **CSS-2008** scheme.
9. **District Topper** in ‘**Physics**’ subject in CBSE 12<sup>th</sup> Exam in 2008.

## **Courses**

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1. **Online Courses**
  - NPTEL course on “**Cloud Computing**” by Prof. Soumya K. Ghosh, IIT Kharagpur.
  - NPTEL course on “**Introduction to Internet of Things**” by Prof. Sudip Misra, IIT Kharagpur.
  - NPTEL course on “**Introduction to Industry 4.0 and Industrial Internet of Things**” by Prof. Sudip Misra, IIT Kharagpur.
2. **Relevant courses at JNU:** Data Structure and Algorithms, Mathematical Science, Machine Learning, Pattern Recognition.