

# Mukesh Kumar Giluka

Department of Computer Science and Engineering  
Indian Institute of Information Technology Nagpur  
BSNL RTTC, Near TV Tower, Seminary Hills, Nagpur-06, India

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DOB: 25-12-1983

Male, Single

Category: General

## Objective

To make a career in the field of teaching as well as to sharpen my research skills acquired in the duration of Ph.D.

## Areas of Interest

- **Teaching interest:**

- C and C++ programming
- Data structures and algorithms
- Computer and wireless networks
- Internet of Things (IoT)

- **Research interest:**

- Supporting IoT/M2M in LTE-A and Wi-Fi networks.
- Device-to-device communications.
- Downlink/uplink decoupling in LTE-A networks.
- Vehicle-to-vehicle communications.
- RAN network slicing in LTE-A networks.

- **Non-technical interest:**

- Gandhian philosophy
- Theistic and atheistic spirituality
- Modern and medieval Indian history
- Ayurveda and Indian culture

## Education

- **Ph.D. in Computer Science and Engineering (2018)**

Indian Institute of Technology (IIT) Hyderabad, India.

GPA: 8.79/10

Thesis Title: MAC layer enhancements to support IoT traffic in wireless networks.

Advisor: Dr. Bheemarjuna Reddy Tamma

- **Master of Technology (M.Tech.) in Computer Science and Engineering (2011)**

National Institute of Technology (NIT) Bhopal, India.

GPA: 8.1/10

Thesis Title: Malicious node detection in mobile adhoc network (MANET).

Advisor: Dr. Vasudev Dehalwar

- **Bachelor of Engineering (B.E.) in Computer Science and Engineering (2009)**  
H.N.B. Garhwal University, India.  
Percentage: 71%  
Project Title: Crime reporting system.

### Journal publications

1. **Mukesh Kumar Giluka**, Thomas Valerrian Pasca, Tathagat Priyadarshi, and Bheemarjuna Reddy Tamma, "Enhanced Class Based Dynamic Priority Scheduling to Support Uplink IoT Traffic in LTE-A Networks", accepted in Elsevier journal of Network and Computer Applications, April 2018, Impact Factor 4.
2. **Mukesh Kumar Giluka**, Thomas V. Pasca, Nitish Rajoria, and Bheemarjuna Reddy Tamma, "On Efficient Scheduling of H2H Traffic and Reducing Signaling Overhead due to Uplink Small Data M2M Traffic in LTE-A Networks, accepted in Springer journal of Wireless Personal Communications, May 2018, Impact Factor 1.2

### Conference publications

1. **Mukesh Kumar Giluka**, Tathagat Priyadarshi, Shakti Kumar, Antony Franklin A, and Bheemarjuna Reddy Tamma, "An Enhanced EAB Algorithm to Reduce RACH Congestion Due to IoT Traffic in LTE-A Networks", in Proc. of IEEE WF-IoT, Singapore, Feb. 2018.
2. **Mukesh Kumar Giluka**, M Sibgath Ali Khan, G M Krishna, Touheed Anwar Atif, Vanlin Sathya, and Bheemarjuna Reddy Tamma, "On Handovers in Uplink/Downlink Decoupled LTE HetNets, in Proc. of Workshop on Novel Waveform and MAC Design for 5G, IEEE WCNC, Qatar, April 2016.
3. **Mukesh Kumar Giluka**, M Sibgath Ali Khan, Vanlin Sathya, and Antony Franklin A, "Leveraging Decoupling in Enabling Energy Aware D2D Communications", in Proc. of IEEE ANTS, India, November 2016.
4. Navroz Firoz Charania, **Mukesh Kumar Giluka**, Bheemarjuna Reddy Tamma, and Antony Franklin A, " DEARF: Delay and Energy Aware RAW Formation Scheme to Support Delay Sensitive M2M Traffic in IEEE 802.11ah Networks", in Proc. of IEEE ANTS, India, November 2016.
5. Milind Tahalani, Vanlin Sathya, Arun Ramamurthy, Suhas U S, **Mukesh Kumar Giluka**, and Bheemarjuna Reddy Tamma, " Optimal Placement of Femto Base Stations in Enterprise Femtocell Networks, in Proc. of IEEE ANTS, India, December 2014.
6. **Mukesh Kumar Giluka**, Sharath Kumar N, Nitish Rajoria, and Bheemarjuna Reddy Tamma, "Class Based Priority Scheduling to Support Machine to Machine Communications in LTE Systems", in Proc. of NCC, India, February 2014.
7. **Mukesh Kumar Giluka**, Nitish Rajoria, Ashish C. Kulkarni, Vanlin Sathya, and Bheemarjuna Reddy Tamma,"Class Based Dynamic Priority Scheduling for Uplink to Support M2M Communications in LTE", in Proc. of IEEE WF-IoT, South Korea, March 2014.
8. **Mukesh Kumar Giluka**, Aiswarya Prasannakumar, Nitish Rajoria, and Bheemarjuna Reddy Tamma, "Adaptive RACH Congestion Management to Support M2M Communication in 4G LTE Networks, in Proc. of IEEE ANTS, India, December 2013.

9. Rahul Raghuvanshi, **Mukesh Kumar Giluka**, Vasudev Dehalwar, "An Approach to Suppress Selfish Behavior of a Node in MANET by Hiding Destination Identity in Routing Path", in Proc. of Springer ACC, India, July 2011.

## Posters

1. **Mukesh Kumar Giluka**, Sharath Kumar N, and Bheemarjuna Reddy Tamma, "Radio Resource Allocation for Supporting M2M Communications in LTE Cellular Networks", presented in ACM Mobihoc, India, July 2013.
2. Aiswarya Prasannakumar, **Mukesh Kumar Giluka**, and Bheemarjuna Reddy Tamma, "Congestion Control for M2M Communications in LTE Cellular Networks", presented in ACM Mobihoc, India, July 2013.

## Skills/Attributes

- Programming experience in C, C++, MATLAB.
- Worked on event based network simulators such as QUALNET and NS-3.

## Experience during PhD

- Guided three postgraduate students for their Master's thesis.
- Guided a dozen of undergraduates and summer interns in their research projects.
- Worked as a teaching assistant for five courses.

## Experience after PhD

- Worked as Assistant Professor in the Department of Computer Science and Engineering, Jaypee University of Engineering and Technology, Guna, M.P. from January 2019 to June 2019.
- Joined IIIT Nagpur as Assistant Professor in the Department of Computer Science and Engineering on July 2019.

## Professional services

Contributed as a reviewer for the following conferences:

- IEEE NCC
- IEEE VTC
- IEEE ANTS

- ACM MSWiM
- IEEE GLOBECOM
- Arabian Journal of Science and Engineering.
- ACM MobiCom

## Academic achievements

- **Received Ph.D. Research Fellowship** from Ministry of Human Resource Development, Govt. of India.
- **Received Research Fellowship** from the project Cyber Physical Systems, Govt. of India.
- **Received Research Fellowship** from the project Converged Cloud RAN, Govt. of India.
- **Received Full Grant** from IIT Hyderabad to attend conferences in overseas, IEEE WF-IoT 2014, South Korea and IEEE WF-IoT 2018, Singapore.
- **Received Travel Grant** to attend **Microsoft** Summer School on Internet of Things and **JTG** Summer School on Information Theory, Signal Processing, Telecommunication, and Networking.
- **Cited by AT&T** in their patent.
- Cited by several top-tier IEEE Transactions.

## Social services

- **Serving as one of the Admins** of a Facebook group (more than two lakhs members) from last two years to assist poor and remotely located students of India in pursuing higher studies in Computer Science.
- Worked for an Hyderabad-based NGO for four years which works for girl child education.
- Worked for an Hyderabad-based NGO for three years which works for rehabilitation of elderly people with Down Syndrome.
- **Worked as a recordist** for an Bhopal-based NGO for 1.5 years which works for the education of blind students.

## References

1. **Dr. Bheemarjuna Reddy Tamma**  
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Department of Computer Science and Engineering, IIT Hyderabad, India  
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2. **Dr. Antony Franklin**

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3. **Dr. Shishir Kumar**

Professor

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