Dr. Bivas Mitra,
http://cse.iitkgp.ac.in/~bivasm/
Associate Professor, Department of CSE, IIT Kharagpur

- **Educational Qualification (Bachelor to Doctoral):**

  o PhD in Computer Science and Engineering, IIT Kharagpur (2011)
  o M. Tech in Computer Science and Engineering, IIT Kharagpur (2003)
  o B. Tech in Computer Science and Engineering, Vidyasagar University (2001)

- **Professional Experience:**

  o Associate Professor (CSE), IIT Kharagpur (March 2020 – Present)
  o Assistant Professor (CSE), IIT Kharagpur (April 2013 – March 2020)
  o Chief Engineer, Samsung Electronics, Noida (August 2012-March 2013)
  o Postdoctoral Researcher, Université Catholique de Louvain (UCL), Belgium, (July 2011-July 2012)
  o Postdoctoral Researcher, French National Centre for Scientific Research (CNRS), Paris, France, (May 2010-June 2011)

- **Specialization and Expertise:** Socio-Mobile Applications, Data science, Affective computing

- **Awards and Distinctions:**

  o NetApp Faculty Fellowship , Oct. 2018.
  o "Best Student Paper Award" in IEEE MDM 2017, KAIST, Daejeon, South Korea.
  o Best Poster Award, Xerox Research Symposium (XRCI Open 2014), Bangalore
  o DAAD-IIT Faculty Exchange Fellowship, 2014, German Academic Exchange Service (DAAD)
  o SAP Lab India Doctoral Fellowship, January 2008-May 2010, SAP Lab India
  o National Doctoral Fellowship, January 2007-Dec 2007, AICTE

- **Top publications in last ten years:**
    1. Sreenivasan Ramasamy Ramamurthy, Soumyajit Chatterjee, Elizabeth Galik, Aryya Gangopadhyay, Nirmalya Roy, **Bivas Mitra**, Sandip Chakraborty, "CogAx: Early Assessment of Cognitive and Functional Impairment from Accelerometry", ***IEEE PerCom 2022***, Pisa, Italy, March 2022.
    2. Surjya Ghosh, Salma Mandi, **Bivas Mitra**, Pradipta De, "Exploring Smartphone Keyboard Interactions for Experience Sampling Method driven Probe Generation", ***IUI 2021***, Texas, USA, April 2021. (Short paper)
    3. Ayan Kumar Bhowmick, Soumajit Pramanik, Sayan Pathak, **Bivas Mitra**, "On the Role of Micro-categories to Characterize Event Popularity in Meetup", ***ICWSM 2021***, Atlanta, Georgia, USA, June 2021.
    4. Surjya Ghosh, Niloy Ganguly, **Bivas Mitra**, Pradipta De, "Designing An Experience Sampling Method for Smartphone based Emotion Detection", ***IEEE Transactions on Affective Computing***, Vol. 12, No. 4, 2021.
    5. Soumyajit Chatterjee, Avijoy Chakma, Aryya Gangopadhyay, Nirmalya Roy, **Bivas Mitra**, Sandip Chakraborty, "LASO: Exploiting Locomotive and Acoustic Signatures over the Edge to Annotate IMU Data for Human Activity Recognition", ***ICMI 2020***, Utrecht, The Netherlands, Oct. 2020.
    6. Soumyajit Chatterjee, Adrija Bhowmik, Arun Singh, Surjya Ghosh, **Bivas Mitra**, Sandip Chakraborty, "Detecting Mobility Context over Smartphones using Typing and Smartphone Engagement Patterns", ***PerCom 2020***, Austin, Texas, USA, March 2020. (Concise paper)
    7. Ayan Kumar Bhowmick, Koushik Meneni, Jean-Loup Guillaume, Maximilien Danisch and **Bivas Mitra**, "LouvainNE: Hierarchical Louvain Method for High Quality and Scalable Graph Embedding", ***WSDM 2020***, Houston, Texas, USA, February 2020.
    8. Soumajit Pramanik, Rajarshi Haldar, Anand Kumar, Sayan Pathak and Bivas Mitra, "Deep Learning driven Venue Recommender for Event-based Social Networks", ***IEEE Transactions on Knowledge and Data Engineering (TKDE)***, Volume 32, Number 11, Nov. 2020.
    9. Soumajit Pramanik, Surya Teja Gora, Ravi Sundaram, Niloy Ganguly and **Bivas Mitra**, "On the Migration of Researchers across Scientific Domains", ***ICWSM 2019***, Munich, Germany, June 2019.

10. Snigdha Das, Soumyajit Chatterjee, Sandip Chakraborty and **Bivas Mitra**, "GroupSense: A Lightweight Framework for Group Identification", *IEEE Transactions on Mobile Computing*, 2018 (In-press).

11. Rohit Verma, Surjya Ghosh, Saketh Mahankali, Niloy Ganguly, **Bivas Mitra**, Sandip Chakraborty, "ComfRide: A Smartphone based System for Comfortable Public Transport Recommendation", *ACM RecSys 2018*, Vancouver, Canada, Oct. 2018.

12. Subhendu Khatuya, Niloy Ganguly, Jayanta Basak, Madhumita Bharde and **Bivas Mitra**, "ADELE: Anomaly Detection from Event Log Empiricism", *IEEE INFOCOM 2018*, Honolulu, HI, USA, April 2018.

13. Rohit Verma, Gyanesha Prajjwal, **Bivas Mitra** and Sandip Chakraborty, "Mining Spatio-temporal Data for Computing Driver Stress and Observing Its Effects on Driving Behavior", *ACM SIGSPATIAL 2018*, Seattle, Washington, USA, Nov. 2018. (Short paper)

14. Rohit Verma, Surjya Ghosh, Niloy Ganguly, **Bivas Mitra** and Sandip Chakraborty, "Smart-phone based Spatio-temporal Sensing for Annotated Transit Map Generation", *ACM SIGSPATIAL 2017*, Redondo Beach, California, USA, Nov. 2017.

15. Surjya Ghosh, Niloy Ganguly, **Bivas Mitra**, Pradipta De, "TapSense: Combining Self-Report Patterns and Typing Characteristics for Smartphone based Emotion Detection", *MobileHCI 2017*, Vienna, Austria, Sep 2017.

16. Surjya Ghosh, Niloy Ganguly, **Bivas Mitra**, Pradipta De, "Evaluating Effectiveness of Smartphone Typing as an Indicator of User Emotion", *ACII 2017*, San Antonio, Texas, USA, October 2017.

17. Rohit Verma, Aviral Shrivastava, **Bivas Mitra**, Sujoy Saha, Niloy Ganguly, Subrata Nandi and Sandip Chakraborty, "UrbanEye: An Outdoor Localization System for Public Transport", *IEEE INFOCOM 2016*, San Fransisco, CA, USA, April 10-15, 2016.

18. Sourav Kumar Dandapat, Swadhin Pradhan, Bivas Mitra, Romit Roy Choudhury, Niloy Ganguly, "ActivPass: Your Daily Activity is Your Password", *ACM SIGCHI 2015*, Seoul, Korea, April 2015

19. Saurabh Gupta, Sayan Pathak, Bivas Mitra, "Complementary usage of Tips and Reviews for Location Recommendation in Yelp", *PA-KDD 2015*, Ho Chi Minh City, Vietnam, May 2015.

20. Joydeep Chandra, Bivas Mitra and Niloy Ganguly, "Effect of Constraints on Superpeer Topologies", *IEEE INFOCOM 2013* (Mini-Conference), Turin, Italy, April 2013.

21. Animesh Srivastava, **Bivas Mitra**, Niloy Ganguly, and Fernando Peruani, "Correlations in Complex Networks Under Attack", *Physical Review E,* 86, 2012.

22. **Bivas Mitra**, Lionel Tabourier, Camille Roth, "Intrinsically Dynamic Network Communities", *Computer Networks,* Vol. 56, pp 1041–1053, 2012.

23. Sourav Kumar Dandapat, **Bivas Mitra**, Romit Roy Choudhury and Niloy Ganguly, "Smart Association Control in Wireless Mobile Environment Using Max-Flow", *IEEE Transactions on Network and Service Management*, Vol. 9, No. 1, pp. 73 – 86, March 2012.

24. **Bivas Mitra,** Abhishek Kumar Dubey, Sujoy Ghose, Niloy Ganguly, "How do Superpeer Networks Emerge?", *IEEE INFOCOM 2010*, San Diego, USA, March 2010**.**

▪ **Major sponsored R&D projects completed/handled:**

1. Project Title: SysFix: Building an End-to-end Troubleshooting Solution for Large-scale Systems with Automated Failure diagnosis, Root cause analysis and Remediation
Funding Agency: DST-SERB
Project Duration: 2022-2025
Role: Principal Investigator

2. Project Title: StressSense: Developing a Framework for Early Detection of Stress and Depression from Smartphone Engagements (Collaborative Project with University of Maryland, Baltimore County, USA)
Funding Agency: MHRD (SPARC)
Project Duration: 2019-2022
Role: Principal Investigator

3. Project Title: Anomaly Detection using Logs
Funding Agency: Huawei Technologies India Private Limited, Bangalore
Project Duration: 2020-2024

Role: Joint-Principal Investigator

4. Project Title: Model Development for Storage System Troubleshooting and Workload Characterization
Funding Agency: NetApp India Private Limited, Bangalore
Project Duration: 2018-2024
Role: Principal Investigator

5. Project Title: Evolving Communities and Information Spreading (Collaborative Project with CNRS-UPMC, Paris, France)
Funding Agency: Indo-French Center for the Promotion of Advanced Research
Project Duration: 2014-2017
Role: Principal Investigator

6. Behavior Modeling in Multi-Sensor Environments - Integrating Environment Sensing, Human Sensing & Social Sensing for Rich Insights
Funding Agency: TCS Innovation Lab, New Delhi
Project Duration: 2018-2020
Role: Co-Principal Investigator

7. Project Title: Post-disaster Situation Analysis and Resource Management using Delay-Tolerant Peer-to-Peer Wireless Networks (DISARM)
Funding Agency: ITRA-Media Lab Asia, DIT
Project Duration: 2013-2018
Role: Co-Principal Investigator

8. Project Title: Characterization & modelling information cascade appearing in social media in response to specific emergency events (DYCIN) – topping up grant of DISARM
Funding Agency: Indo-Belgian Research and Technology Cooperation
Project Duration: 2014-2017
Role: Co-Principal Investigator

9. Project Title: Teaching Learning Centre for Internet-of-things
Funding Agency: MHRD
Project Duration: 2016-2019
Role: Co-Principal Investigator

Technology development/translation/initiation
Patent Published
  o Method and Apparatus for Detecting Malware and Recording Medium Thereof, US 2014/0351934 A1, November 2014, USA (with Samsung Electronics)