Anandarup Mukherjee

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Present DESIGNATION

- Ph.D. scholar & Senior Research Fellow, IIT Kharagpur.
- Founder & Director, Sensordrops Networks Pvt. Ltd., STEP, IIT Kharagpur.
- Grad. Student Member, IEEE & ACM (in over 10 Technical committees and councils).

KEY EXPERTISE

Internet of Things, Unmanned Aerial Vehicular Networks, Machine Learning & AI for IoT.

HIGHEST DEGREE Master of Technology (M.Tech) in Micro-Electronics & VLSI Design (First Division), Institute of Engineering and Management, Kolkata, 10^{th} May 2012

Publications

- Total of >30 referred scientific publications.
- More than 90 citations with an h-index of 6 (Google Scholar).
- Published in high-impact journals such as IEEE Communications Magazine (IF-2019=10.35), IEEE IoT Journal (IF-2019=9.51), IEEE Transactions on Vehicular Technology (IF-2019=5.339), IEEE Transactions on Sustainable Computing (IF-2019=2.456), and others.
- Published in top communications and networking conferences such as IEEE INFOCOM 2020, IEEE ICC 2020, IEEE WCNC 2019, 2018, and others.
- Authored 2 textbooks : Introduction to IoT Cambridge University Press, UK (in press) and Introduction to Industrial IoT and Industry 4.0 - CRC Press, USA (forthcoming).

Reviewing

Regular referee for numerous journals and Transactions, including IEEE, Elseiver, Wiley, and Springer, and conferences. Approximately 50 referred articles reviewed in 2019/2020 (Publons).

Talks/ Presentations/ Hands-on Sessions

Gave 7 keynotes/talks/hands-on sessions on UAVs, UAV Networks, IoT in Agriculture, and my related topics of research in India and UK. Some of the key talks are :

- Phantom Networks: The Intangible Shoot-and-Scoot Communication Paradigm, Keynote Lecture, Loughborough University, UK, Feb. 2020.
- IoT Hands-on Session, IIT Kharagpur, India, March 2019.
- Networked UAV Controls and Collaborative UAV Network Formation, Loughborough University, UK, Oct. 2017.

Awards & RECOGNITION

- Top Downloaded Article 2017-2018, awarded by Wiley Interdisciplinary Reviews Data Mining and Knowledge Discovery for the paper "Knowledge discovery for enabling smart Internet of Things: A survey."
- InSc Young Achiever Award, awarded by the Institute of Scholars, Bangalore for the paper "Blind Entity Identification for Agricultural IoT Deployments" in 2019.
- Dr. Amulya K. N. Reddy Award, awarded by the Hari-om Ashram Prerit Society for commercialization of prototype (INR 50,000) in 2018.
- The Internet of Things Quiz Contest Gold Medal, awarded by the Dept. of IT & Electronics, Govt. of West Bengal at Biswa Bangla Convention Center, Kolkata in 2018.
- Awarded the 2018 Gandhian Young Technological Innovation Award (GYTI) for "societally relevant innovation" by the President of India at the Rashtrapati Bhawan. (Media Coverage
- Awarded with more than INR 532,000 worth of travel grants for attending international conferences, workshops and panels from multiple agencies (IIT Kharagpur, Microsoft Research -ACM, UGC-UKIERI, DEITY).
- Media Coverage for being part of the development and operational team of AMBUSENS An ambulatory patient healthcare, remote monitoring system in 2017. (Economic Times, Hindustan Times, Indian Express, Times of India, Firstpost)
- Media Coverage for developing BHIM Autonomous Drone in 2017. (The Hindu, LinkedIn, Times of India, India Today)
- 2nd position awarded in the 2016 IBM day prototype demo at IIT Kharagpur, India for "Batteryless Sensing in IoT".
- 3rd position awarded in the 2015 Johnson Controls Innovation Challenge at IIT Kharagpur, India for "Smart Home Automation System".
- Special mention for organizing 2015 Hardware Hackathon at IEEE Local Student Branch, IEEE PULSE, EMBS PULSE

Sponsored Projects

Internal coordinator and participant of 1 international (UGC-UKIERI Indo-UK) project and 4 national projects of various funding agencies (INAE-DST Abdul Kalam National Innovation Fellowship, ITRA-Media Lab Asia, ICAR, and MEITY).

Teaching

- Helped in design, upkeep, and management of NPTEL's popular "Introduction to IoT" course since 2017.
- Took various lectures and labs on Computing and Programming as a Teaching Assistant at the Department of Computer Science & Engineering, IIT Khargapur since 2016.
- Took lectures on various basic and advanced electronics and communication engineering courses as an Assistant Professor at University of Engineering and Management, Jaipur from 2012-2014.

Management

- Presently, managing and designing sensor & communication solutions for Calcutta Electric Supply Company's (CESC) collaborative project (INR 900,000) on IoT-based monitoring of Partial Discharge in Heavy Electrical installations.
- Designed and sold a mesh networked remote temperature monitoring setup and Android appbased visualizer to TCS Research & Innovation in April 2019.
- Managing a team of 10 research scholars at the SWAN lab as a Research group leader since 2016. Assisted Masters' and Bachelors' thesis of more than 8 students of SWAN Lab in IIT Kharagpur since 2015. Managed and guided >35 UG and PG research interns at SWAN lab, since 2015.
- Head (Membership Development), IEEE Student Branch, IIT Kharagpur for A.Y. 2015-2016 (IEEE)