

Arif Mohd. Kamal

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Professional Experience

July 2019- Dec. 2019 📌 **Trainee Engineer**, Hughes Systique Corporation, Gurugram, Haryana, India.

Education

- 2020 –Present 📌 **Ph.D., Electronic Systems Engineering, Indian Institute of Science, Bangalore, Karnataka.**
- 2017 – 2019 📌 **M.Tech., Electronics and Communication Engineering, Jamia Millia Islamia, New Delhi, Delhi.**
- 2010 – 2014 📌 **B.Tech., Electronics and Communication Engineering, Uttar Pradesh Technical University, Lucknow, U.P.**
- 2007 – 2009 📌 **Intermediate, Ghayasiban Public Inter College, Lucknow, U.P.**
- 2006 – 2007 📌 **Matriculation, Pt.R.P.U.Inter College, Raniganj, U.P.**

Skills

- Languages 📌 Strong reading, writing, and speaking competencies for Hindi and English.
- Coding 📌 MATLAB, Embedded C, Python, LabVIEW.
- Simulation Tool 📌 COMSOL, OptiSystem.
- Misc. 📌 Origin Pro, Fabrication Technology, Material Characterization, Semiconductor Processing, Academic research, Teaching, Training, Consultation, \LaTeX Typesetting and Publishing.

Miscellaneous Experience

Achievements

- 2020 📌 **Prime Minister's Research Fellow (PMRF).**
- 2019 📌 **Qualified UGC-NET-JRF Exam with 98.44 Percentile.**
- 2017 📌 **Selected for Site-Engineer (S&T) in Rail Vikas Nigam Limited (RVNL),Kolkata,India.**
- 2016 📌 **Qualified GATE Exam with 94 Percentile.**
- 2014 📌 **Qualified GATE Exam with 94 Percentile.**

Miscellaneous Experience (continued)

Certification

- 2012 **Advanced Robotics and Embedded C**, Technophilia Systems, Ahmedabad, India.
- 2011 **Workshop on "Information Security and Forensics"**, Cybercure, Bareilly, India.
- 2012 **Workshop on "VHDL"**, Cetpa Infotech, Lucknow, India.

Training & Responsibilities

- 2013 **Advance Telecom Technologies**, RTTC, BSNL, Ahmedabad, India.
- 2019 **Student Placement Coordinator**, Jamia Millia Islamia, New Delhi, India.
- 2022 **Convener of EECS Division Sports Meet**, Indian Institute of Science, Bangalore, India.

Patent and Research Publications

- [1] **Arif Mohd. Kamal, Uttam M. Pal, Manu K.S., Hardik J. Pandya** "Multimodal detection device and method for cancer margin assessment" 202241012649 (March 15, 2022).
- [2] **Kamal, Arif Mohd, et al.** "Engineering Approaches for Breast Cancer Diagnosis: A Review." IEEE Reviews in Biomedical Engineering (2022).
- [3] **Kamal, Arif Mohd, et al.** "Toward the development of portable light emitting diode-based polarization spectroscopy tools for breast cancer diagnosis." Journal of Biophotonics 15.3 (2022): e202100282.
- [4] **Kamal, Arif Mohd, et al.** "Towards development of LED-Based time-domain near-IR spectroscopy system for delineating breast cancer from adjacent normal tissue." IEEE Sensors Journal 21.16 (2021): 17758-17765.
- [5] **Bagha Twinkle, Arif Mohd Kamal, Uttam M. Pal, Prasanna Simha Mohan Rao, and Hardik J. Pandya.** "Toward the development of a polarimetric tool to diagnose the fibrotic human ventricular myocardium." Journal of Biomedical Optics 27, no. 5 (2022): 055001.
- [6] **Kamal, Arif Mohd, et al.** "Towards the Development of an Intraoperative Probe for Breast Cancer Margin Assessment." Optics and the Brain. Optica Publishing Group, 2022.
- [7] **Kamal, Arif Mohd, and Hardik J. Pandya.** "Near-infrared polarization-based optical system for delineating healthy and fibrotic heart tissues." Applied Industrial Spectroscopy. Optica Publishing Group, 2022.
- [8] **Uttam M. Pal, Arif Mohd Kamal, and Hardik J. Pandya.** "Opto-Acoustic Multimodal System to Delineate Adjacent Normal from Breast Biopsy Cancerous Tissue." 2021 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT). IEEE, 2021.

Patent and Research Publications (continued)

- [9] Uttam M. Pal, **Arif Mohd Kamal**, Ashika Nayak, Tejaswi Mediseti, and Hardik J. Pandya. "**Towards an opto-thermo-acoustic (ota) based diagnostic tool to delineate adjacent normal from cancerous tissue for cancer margin assessment.**" In **European Conference on Biomedical Optics**, pp. ETu4A-4. **Optical Society of America**, 2021.
- [10] Anju Joshi, Anil GK Vishnu, Tushar Sakorikar, **Arif Mohd Kamal**, Jayant S. Vaidya, and Hardik J. Pandya. "**Recent advances in biosensing approaches for point-of-care breast cancer diagnostics: Challenges and future perspectives.**" **Nanoscale Advances** (2021).