Dr. Abdullah Bin Queyam

I am a Professor of Biomedical Instrumentation and also loves Web Developement.

Research Interests | Biomedical Instrumentation, Virtual Instrumentation, Portable Healthcare Instrumentation, Medical Signal Processing, Pattern Recognition, Signal Decomposition and Web Development.

WORK EXPERIENCE

Assistant Professor at Banasthali Vidyapith

Rajasthan, INDIA | June 2018 - Present

- **Department |** School of Automation
- **Nature of Job |** Teaching and Academic
- **Responsibilities |** Taught students applied knowledge in the areas of Digital Electronics, Biomedical Instrumentation, Embedded Systems and Static Web Development. Involved with development and enhancement of Laboratories in the Department.

Research Scholar at NIT, Jalandhar

Punjab, INDIA | June 2014 - June 2018

- **Department |** Electronics Instrumentation and Control Engineering
- **Nature of Job |** Research Work and Teaching Assistant
- **Responsibilities |** Research and Development of a low-cost feto-maternal wellbeing monitoring device using AI and ML algorithms.

Assistant Professor at Mewar University

Rajasthan, INDIA | June 2013 - June 2014

- **Department |** Electronics and Communication Engineering
- **Nature of Job |** Teaching and Academic
- **Responsibilities |** Taught undergraduate students as well as postgraduate students applied knowledge in the areas of Embedded Electronics, Instrumentation and Research. Established biomedical laboratory and taught students about human physiology and their measurements.

Placement Leader at Thapar University

Punjab, INDIA | June 2012 - June 2013

- **Department |** | Center for Industrial Liasion & Placement (CILP)
- **Nature of Job |** Arranges campus interviews for placement of final year students of all branches by inviting various Public Sector and Private organization. Closely involved in Industry/Institute Interaction Programmes.

PROJECTS

Feto-Maternal Monitoring System

AICTE, GoI Funded Project

- **Ph.D. Research Work**
- **Abstract |** Designed and developed a real-time multi-parameter monitoring system at an affordable cost which provides a means of feto-maternal surveillance in high-risk pregnancies. Implemented health telemonitoring using smartphone applications and Internet/Cloud services which greatly improves the reach of pregnant women to the healthcare services and also helps in patient-specific database generation.

Stress Detection of Automobile Drivers

Thapar University

- **M.E. Research Work**
- **Abstract |** In order to minimize human error while driving, we can monitor stress and fatigue by measuring physiological parameters like ElectroCardioGram (ECG), ElectroMyoGram (EMG), Skin Conductance (SC) also called as Galvanic Skin Response (GSR) and Respiration Rate (RR) continuously over a period of time. Hence, designed and developed a stress level prediction algorithm for automobile drivers using neural networks.

PERSONAL INFORMATION

- +91 9815810631
- abdullahbinqueyam@gmail.com
- scholar.google.co.in/citations?user=bothSAIAAAAJ
- researchgate.net/profile/Abdullah_Bin_Queyam
- linkedin.com/in/abdullah-bin-queyam-39192414
- orcid.org/0000-0003-1393-872X
- https://www.inkredibledoc.com

EDUCATION

Ph.D. in Electronics Instrumentation and Control

- **University |** NIT Jalandhar, INDIA
- **Duration |** 2014 - 2018

M.E. in Electronics Instrumentation and Control

- **University |** Thapar University, INDIA
- **Duration |** 2011 - 2013

B.Tech. in Electronics Instrumentation and Control

- **University |** RTU, Kota, INDIA
- **Duration |** 2006 - 2010

TECHNICAL SKILLS

- JavaScript/React
- Python
- LabVIEW/MATLAB
- HTML/PHP/CSS
- MIT-AppInventor

PROFESSIONAL SKILLS

- Effective communication
- Team player
- Strong problem solver
- Good time management

LANGUAGES

- **English** | (Full business proficiency)
- **Hindi** | (Native proficiency)

BOOK CHAPTERS

- R. Kumar, S. K. Pahuja, A. Sengupta, **A. B. Queyam** , "Electrical Impedance Tomography: A Real Time Medical Imaging Technique," Handbook of Research on Advanced Concepts in Real-Time Image and Video Processing, IGI Global Publisher, Ch. 6. pp 130-152, August 2017. [SCOPUS INDEXiNG] AUG. 2017

INTERNATIONAL CONFERENCES

- **A. B. Queyam** , Ramesh Kumar Meena, S. K. Pahuja and D. Singh, "An IoT based Multi-Parameter Data Acquisition System for Eff icient Bio-Telemonitoring of Pregnant Women at Home," 8th Interna- tional Conference CONFLUENCE–2018 on Cloud Computing, Data Science & Engineering, 2018. JAN. 2018

- Ramesh Kumar, Sharvan Kumar, **A. B. Queyam** and A. Sengupta "An Experimental validation of Bio-impedance Technique for medical & non-medical Application," 8th International Conference CONFLUENCE–2018 on Cloud Computing, Data Science & Engineering, 2018. JAN. 2018

- **A. B. Queyam**, S.K.Pahuja, D.Singh, "Fetalwell-beingPredictionUsingSimulationofMarkovBased Mathematical Model," Indian Journal of Physiology and Pharmacology - Supplement, APPICON 2015, AIIMS Jodhpur , 59(5), 2015. DEC. 2015

INTERNATIONAL JOURNALS

- **A. B. Queyam**, S. K. Pahuja, and D. Singh, "Doppler Ultrasound Based Non-Invasive Heart Rate Tele- monitoring System for Wellbeing Assessment," International Journal of Intelligent Systems and Ap- plications (IJISA), vol. 10, no. 12, pp. 69-79, Dec. 2018. [SCOPUS INDEXING] DEC. 2018

- **A. B. Queyam**, S. K. Pahuja, and D. Singh, "Quantification of Feto-Maternal Heart Rate from Abdom- inal ECG Signal Using Empirical Mode Decomposition for Heart Rate Variability Analysis," MDPI, Technologies, 5(4), 68, 2017. [WEB OF SCIENCE, ESCI] OCT. 2017

- **A. B. Queyam**, S. K. Pahuja, and D. Singh, "Non-Invasive Feto-Maternal Well-Being Monitoring: A Review of Methods," Journal of Engineering Science and Technology Review (JESTR), vol. 6, no. 5, pp. 7–14, Mar. 2017. [UGC APPROVED, SCOPUS INDEXING] MAR. 2017

- **A. B. Queyam**, S. K. Pahuja, and D. Singh, "Simulation and Analysis of Umbilical Blood Flow us- ing Markov-based Mathematical Model," International Journal of Intelligent Systems and Applications (IJISA), vol. 9, no. 3, pp. 41–50, Mar. 2017. [UGC APPROVED, SCOPUS INDEXING] MAR. 2017

- **A. B. Queyam**, S. K. Pahuja, and D. Singh, "LabVIEW-based Virtual Instrument for Simulation of Doppler Blood Flow Velocimetry of Umbilical Artery," Journal of Instrumentation Technology & Inno- vation (JoITI), vol. 6, no. 1, pp. 1–9, 2016. [UGC APPROVED] FEB. 2016

- M. Singh and **A. B. Queyam**, "A Novel Method of Stress Detection using Physiological Measure- ments of Automobile Drivers," International Journal of Electronics Engineering (IJEE), no. 2, pp. 13–20, 2013. [UGC APPROVED, ICI INDEXING] DEC. 2013

- M. Singh and **A. B. Queyam**, "Correlation between Physiological Parameters of Automobile Drivers and Traff ic Conditions ," International Journal of Electronics Engineering (IJEE), no. 2, pp. 6–12, 2013. [UGC APPROVED, ICI INDEXING] DEC. 2013

- M. Singh and **A. B. Queyam**,"Stress Detection in Automobile Drivers using Physiological Param- eters: A Review," International Journal of Electronics Engineering (IJEE), no. 2, pp. 1–5, 2013. [UGC APPROVED, ICI INDEXING] DEC. 2013

SUBJECTS TAUGHT

- Physiological Control Systems
- Neural Networks
- Digital Image Processing
- Fuzzy Logic Control
- Control System
- Biomedical Instrumentation
- Measurement and Instrumentation
- Communication Systems
- Digital Electronics
- Virtual Instrumentation
- Microprocessors and Microcontrollers

₹ FELLOWSHIPS AND GRANTS

- Recieved MHRD, Govt. of India Fellowship for Full-Time Ph.D. Program. 2014 – 2018

- Recieved a Project Grant from TEQIP-II (MHRD) for project titled "Feto-Maternal Monitoring System" Under Enhancement of R & D and Institutional Consultancy Activity. Reference No. NITJ/TEQIP-II/R&D/1825, Dated: 24–11–2015 2016 – 2017

- Recieved MHRD, Govt. of India Fellowship for Full-Time M.E. Program. 2011 – 2013

ACADEMIC ACHIEVEMENTS

- GATE (Graduate Aptitude Test in Engineering) qualified. (AIR–863) 2010

- Ranked 2nd in Electronics Instrumentation and Control Engineering (EIC) Department in B.Tech Uni- versity Examination. 2010

- Passed the Certificate 'A' Examination of National Cadet Corps (NCC) 'Army Wing' and scored 'B' Grade. 2001

EXTRACURRICULAR

- Placement Leader of the THAPAR PLACEMENT COUNCIL 2013.

- Participated in Summer Sports Coaching Camp in Cricket organized by Atomic Energy Central School (AECS),in collabora- tionwithDepartmentof AtomicEnergy (DAE)SportsandCulturalCouncil, Mumbai.

- Winner of Basketball 'Senior Group' Team in AECS, Rawatbhata.

SHORT-TERM COURSE/WORKSHOPS ORGANIZED

- Organized Two-days Workshop on Python and its Application under the scheme of Consolidation of University Research for Innovation and Excellence-Artificial Intelligence by DST,Govt. of India, at School of Automation, Banasthali Vidyapith, Rajasthan, INDIA. JAN. 2020
- Organized Four-days Workshop on Python and its Application in Machine Learning under the scheme of Consolidation of University Research for Innovation and Excellence-Artificial Intelligence by DST, Govt. of India, at School of Automation, Banasthali Vidyapith, Rajasthan, INDIA. DEC. 2019
- Organized One-week Training Programme on Emerging Trends in Science Education: Robotics and Automation in association with Center of Excellence in Science and Mathematics Education (CESME), at School of Automation, Banasthali Vidyapith, Rajasthan, INDIA. MAR. 2019
- Organized One-week TEQIP-II Sponsored Short Term Course on Recent Trends in Instrumentation and Control Engineering (RTICE), in Department of Instrumentation and Control Engineering, Dr. B R Ambedkar National Institute of Technology Jalandhar, Punjab, INDIA. DEC. 2014
- Organized Two-days Workshop on Android Technology, in collaboration with Inspiration Technolo- gies, Faridabad, Haryana, at Mewar University, Chittorgarh, Rajasthan, INDIA. DEC. 2013

SHORT-TERM COURSE/WORKSHOP/SEMINAR ATTENDED

- Participated in One-week Short Term Course on Artificial Intelligence: Theories Techniques and Ap- plications, organized by Centre for Artificial Intelligence, Banasthali Vidyapith, Rajasthan, INDIA. JAN. 2020
- Participated in One-week Faculty Development Programme on Innovation and Research Trends in Artificial Intelligence, organized by Centre for Artificial Intelligence, Banasthali Vidyapith, Rajasthan, INDIA. OCT. 2019
- Attended One-month 3rd Induction Training Programme, under the scheme of PMMMNMTT spon- sored by MHRD, Govt. of India, at Banasthali Vidyapith, Rajasthan, INDIA. DEC. 2018
- Attended GIAN (MHRD) International Summer-Term Course on Medical Textiles and Tissue Engineer- ing, organised by Department of Textile Technology, Dr. B R Ambedkar National Institute of Technology Jalandhar, Punjab, INDIA. JUL. 2016
- Attended One-week TEQIP-II Sponsored Short Term Course on Recent Trends in Soft ware Engineer- ing and Knowledge Mining (RTSEKM), organ- ised by Department of Computer Science and Engineer- ing, Dr. B R Ambedkar National Institute of Technology Jalandhar, Punjab, INDIA. JUN. 2015
- Attended One-week Summer School on Image Processing (SSIP), organised by Department of Com- puter Engineering, National Institute of Technology Kurukshetra, Haryana, INDIA. JUN. 2015
- Attended One-week Short-Term Course on Electronics and Communication System Design Aspects, organised by Department of Electronics and Communication Engineering, Dr. B R Ambedkar National Institute of Technology Jalandhar, Punjab, INDIA. MAY. 2015
- Attended One-week TEQIP-II Sponsored Training Program on Emerging Trends of Research in Elec- tronics and Communication, organised by Department of Electronics and Communication Engineer- ing, Dr. B R Ambedkar National Institute of Technology Jalandhar, Punjab, INDIA. DEC. 2014
- Attended One-week TEQIP-II Sponsored Short Term Course on Recent Trends in Instrumentation and Control Engineering (RTICE), organised by Department of Instrumentation and Control Engineering, Dr. B R Ambedkar National Institute of Technology Jalandhar, INDIA. DEC. 2014
- Attended One-day Workshop on Filter Media Characterization and Technology Transfer Events (FM- CTTE), organised by Department of Textile Technology, Dr. B R Ambedkar National Institute of Tech- nology Jalandhar, Punjab, INDIA. DEC. 2014
- Attended Two-week ISTE Workshop held under the National Mission on Education through ICT (MHRD) on Signals and Systems, conducted by Indian Institute of Technology Kharagpur (IITK), West Bengal, INDIA. JAN. 2014
- Attended Two-day Faculty Training Program on NuMicro ARM Cortex-M0 and its Applications, organ- ised in collaboration with Nuvoton Technology Corporation (NTC), Taiwan at University Institute of Engineering and Technology (UIET), Punjab University, Chandigarh, INDIA. JAN. 2014