RESUME

1. Full Name: Anandarup Mukherjee

2. Organization: Indian Institute of Technology Kharagpur

3. Department: School of Information Technology

4. Roll No: 14IT92P03

5. Area of Research: Aerial Networks

6. Supervisor(s): <u>Dr Sudip Misra</u> (Supervisor), <u>Dr. N. S. Raghuwanshi</u> (Jt. Supervisor)

7. Sex: Male

8. Nationality: Indian

9. Date & Place of Birth: 18th Sept. 1987, Burnpur (W. Bengal)

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14. Educational Qualifications:

- a. M.Tech (9.38/10): Microelectronics & VLSI Design, WBUT, 2012
- b. B.Tech (8.2/10): Electronics & Communication Engg., WBUT, 2010
- c. 10+2 (72.2%): Science, CBSE
- d. 10 (84.2%): Science, CBSE

15. Work Experience:

- a. PhD Scholar (Jan 2015- Present)
- b. Senior Research Fellow, Indian Institute of Technology Kharagpur (Oct 2014- Present)
- c. Assistant Professor, University of Engineering & Management, Jaipur (June 2012 to Oct 2014)
- d. Lecturer, Institute of Engineering & Management, Kolkata, (Aug 2011- May 2012)

16. Technical Skills:

- a. Simulation Platforms Used: MATLAB, Xilinx
- b. Software Development Platforms Used: Android SDK, VB
- c. Languages Known: Python, PERL, Embedded C, JavaScript, PHP
- d. Hardware Processors Used: Arduino, 8051 and AVR Microcontrollers, FPGA (Spartan 3E)
- e. Radios Used: Zigbee, Bluetooth, GSM, GPRS, 433MHz Wireless, IR.













17. Certifications:

- a. IEEE certification on Biometric solutions for security and authentication.
- b. IEEE short term course on IPR Copyrights
- c. IEEE short term course on IPR Plagiarism
- d. IEEE short term course on IPR Trademarks
- e. IEEE short term course on IPR Patents

18. Professional Affiliations:

- a. Associate Member, GSTF, Singapore (Since May 2013)
- b. Member, IEEE (Since Dec 2012)
- c. Member of Editorial Board, International Journal for Scientific Research & Development (Nov. 2013)
- d. Reviewer, IEMCON 2013, Kolkata
- e. Reviewer, IEMCON 2014, Kolkata
- f. Reviewer, IEEE INDICON 2014, Pune

19. Training & Internships:

- a. Faculty Development Programme on "Data Mining & Machine Intelligence" at CTS, Kolkata.
- b. Short term course on VLSI Signal Processing at IIT Kharagpur
- c. Summer Intern at Defence Scientific Information and Documentation Centre (DESIDOC),DRDO, N. Delhi
- d. Intern at the Department of Computer Science and Engineering, IIT Kharagpur
- e. Intern at the Centre for Electronics Test Engineering (CETE), ERTL (E), Kolkata

20. Theses:

- a. Detection of Arrhythmia using Wavelet Transforms, PCA and Neural Networks (M.Tech, 2012)
- b. PC controlled robotic arm with authentication control (B.Tech, 2010)

21. Mini Projects

- a. Library user information retrieval using data mining
- b. Object locator in images using watersheds, segmentation and thresholds
- c. Automated traffic light controller
- d. Folder hider and locker
- e. Laser diode based intelligent visitor counter
- f. Low cost pc based e-stethoscope
- g. Intelligent car
- h. Room temperature monitor
- i. Alpha rover- Internet Controlled Robotic Car with Video Feedback
- j. Internet based home automation system

22. Workshops Attended

- Short Term Course on *VLSI Signal Processing* at INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR, Kharagpur, India
- Workshop on Nano- Bio- Technology at INTERNTIONAL INSTITUTE OF INFORMATION TECHNOLOGY, Pune, India
- Participant in "Robotix" at KSHITIJ at INDIAN INSTITUTE OF TECHNOLOGY KHARGPUR, Kharagpur, India
- Faculty Development Programme (Data Mining, Data Warehousing and Business Intelligence) at *Cognizant Technological Solutions (CTS)*, Kolkata, India.













23. Research Interests:

- a. Wireless Sensor Networks
- b. Embedded Systems
- c. Biomedical Signal Processing
- d. Statistical Analysis

24. Articles:

- A.Mukherjee, S. Goswami, "Visualizing Graphs using PAJEK", PC Quest, Enterprise Solutions, Nov. 2010.
- 2) A. Mukherjee, "Creating VB Macros in MS Word", PC Quest, Developer, Dec. 2010.
- 3) A. Mukherjee, "Folder Manipulator in VB 6.0", Electronics for You, ISSN No.: 0013-516x, Sep. 2011.
- 4) N.Pathak, A. Mukherjee, "NANOENGINEER- A Virtual Nanotechnology Lab", PC Quest, Hands On, Apr. 2013

25. Journal Papers:

- S Goswami, S Misra, C Taneja, A. Mukherjee, "Design and Implementation Analysis of a Public Key Infrastructure- enabled Security Framework for Zigbee Sensor Networks", International Journal of Communication Systems, Int. J. Commun. Syst. (2014), Published online in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/dac.2893, Nov 2014.
 Link: http://onlinelibrary.wiley.com/enhanced/doi/10.1002/dac.2893
- 2) S. Goswami, A. Mukherjee, A. Gupta, M. Kharbanda, P. Soni. "Visualization of Relationship among Library Users based on Circulation Data". Defence Scientific Information and Documentation Centre Journal of Library and Information Technology (DJLIT). Vol. 30, No. 2, ISSN No.: 0974-0643. March 2010.
 Link: http://publications.drdo.gov.in/ojs/index.php/djlit/article/view/5

26. Conference Papers:

- S Goswami, S Misra, C Taneja, A. Mukherjee, "Securing Intra-communication in 6LoWPAN: A
 PKI Integrated Scheme", Advanced Networks and Telecommuncations Systems (ANTS), 2014 IEEE
 International Conference on , vol., no., pp.1,5, 14-17 Dec. 2014, doi: 10.1109/ANTS.2014.7057265.
 Link:
 - $\underline{http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=\&arnumber=7057265\&queryText\%3DSecuring+Intra-communication+in+6LoWPAN\%3A+A+PKI+Integrated+Scheme\%E2\%80\%9D\%2C}$
- A. Mukherjee, K. K. Ghosh, "A Noise Independent Approach to QRS- Complex Detection Using CWT", International Conference on Informatics, Electronics and Vision. Dhaka, Bangladesh. 18- 19 May 2013 (Digital Object Identifier: 10.1109/ICIEV.2013.6572722), p. 1-5, 2013. Link:
 - $\frac{http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=\&arnumber=6572722\&queryText\%3DA+Noise+Independent+Approach+to+QRS-+Complex+Detection+Using+CWT}{}$
- A. Mukherjee, K. K. Ghosh. "An Efficient Wavelet Analysis for ECG Signal Processing" in 2012 International Conference on Informatics, Electronics and Vision. Dhaka, Bangladesh. 18- 19 May 2012, IEEE Xplore (Digital Object Identifier: 10.1109/ICIEV.2012.6317419), p. 411-415, 2012. Link:

 $\frac{\text{http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=\&arnumber=6317419\&queryText\%3DAn+Efficient}{+\text{Wavelet+Analysis+for+ECG+Signal+Processing}}$











