Name : Dr.A.Babukaruppiah

Designation: Professor

Department: Electronics and Communication Engineering

Name of the Organization: Velammal College of Engineering and Technology

Place: Madurai

Pincode: 625009

Mobile: 9942468519

Email: abk@vcet.ac.in

Area of Specialization: Wireless Sensor Networks, Wireless Communication

PROJECT GRANT:

- Principal Investigator for the DST funded project titled "Lifesaving IoT based hazardous gas monitoring and drainage block detection & removal system to prevent manual scavenging" for a worth of Rs.10 lakhs during February 2019.

- Received a grant amount of Rs.15.42 lakhs for the project titled "Decentralized Grid computing for Intrusion Detection in Wireless Sensor Networks for Military Personnel" from DRDO, New Delhi during February 2014.

PAPER PUBLICATIONS

- Published a paper titled "Secured Routing Using Cryptographic Techniques in Wireless Sensor Networks", in International Journal of Research in Advanced Technology – IJORAT, Vol. 1, Issue 1, March 2015.

- Published a paper titled "Energy Efficient Technique for Defense Against Black Hole Attacks in Wireless Sensor Networks", in International Journal of Research in Advanced Technology – IJORAT, Vol. 1, Issue 1, March 2015.

Anna University Refereed Journals

- Babu Karuppiah, A, RajaRaja, R, Shiny Ponmani, S & Meenkashi, C 2017, 'An Enhanced and Secured Wireless Environment using Swept Frequency Capacitive Sensing',Asian Journal of Information Technology, vol. 15, no. 18, pp. 3545 – 3550.

- Babu Karuppiah, A & Rajaram, S 2014, 'False misbehavior elimination of packet dropping attackers during military surveillance using wireless sensor networks', Advances in Military Technology, vol. 9, no.1, pp. 19-30 (ISSN: 18022308 Impact Factor: 0.514-As indicated in Annexure II of the refereed journal list given in Anna University Portal).

- Babu Karuppiah, A & Rajaram, S 2014, 'Signed graph approach in adaptive transmission power to enhance the lifetime of wireless sensor networks', American Journal of Applied Sciences, vol. 11, no. 8, pp. 1292-1300, (ISSN: 15469239 Impact Factor: 0.906-As indicated in Annexure II of the refereed journal list given in Anna University Portal).

- Babu Karuppiah, A & Rajaram, S 2013, 'An improved energy efficient intrusion detection system for false misbehavior elimination in wireless sensor networks', WSEAS Transactions on Information Science and Applications, vol. 10, no. 12, pp. 389-395 (ISSN: 17900832 Impact Factor: 0.568-As indicated in Annexure II of the refereed journal list given in Anna University Portal).

- Babu Karuppiah, A & Rajaram, S 2012, 'An enhanced architecture for pattern matching in FPGA for intrusion detection in wireless sensor networks', Mobile Network Design and Innovation, vol. 4, no. 3, pp. 119-129 (ISSN: 17442869 Impact Factor: 0.797- As indicated in Annexure II

of the refereed journal list given in Anna University Portal).

- Published a paper titled "Cluster Based Energy Efficient Intrusion Detection System for Wireless Sensor Networks" in the Journal of Computer Science and Applications.

- Published a paper titled "Light Weight Encryption algorithm for WSN" in the CIIT International Journal of Wireless Communication in June 2012

- Published a paper titled "Energy Efficient Encryption algorithm for WSN" in the International Journal of Engineering Research and Technology in May 2012

CONFERENCES:

- Presented a paper titled "Life Saving Lane Clearance Mechanism for Speedy Transport of Ambulance" in the National Conference on Innovations in Electronics, Communication and Computing - NCIECC`17 Velammal College of Engineering and Technology, Madurai

- Presented a paper titled "Hardware efficient LED Algorithm for Resource Constrained Devices" in the National Conference on Innovations in Electronics, Communication and Computing - NCIECC`17 Velammal College of Engineering and Technology, Madurai

- Presented a paper titled "Life Saving System against Sexual Abuse of Women" in the National Conference on Innovations in Electronics, Communication and Computing - NCIECC`17 Velammal College of Engineering and Technology, Madurai

- Presented a paper titled "Reducing Energy Consumption Using Minimum Hop Routing Protocol in Wireless Sensor Networks", IEEE Sponsored 3rd International Conference on

Innovations in Information Embedded and Communication Systems ICIIECS16 held at Karpagam College of Engineering, Coimbatore during March 17-18, 2016.

- Presented a paper titled "Mitigating black hole attacks in Wireless Sensor Networks using Modified AODV Routing Protocol", IEEE Sponsored 3rd International Conference on Innovations in Information Embedded and Communication Systems ICIIECS16 held at Karpagam College of Engineering, Coimbatore during March 17-18, 2016.

- Presented a paper titled "An Improvised Hierarchical Black Hole Detection Algorithm in Wireless Sensor Networks" in the International Conference on Information, Innovation in Computing Technologies, ICIICT 2015 held at Saveetha Engineering College, Chennai during February 19-20, 2015.

- Presented a paper titled "A Novel Energy-Efficient Sybil Node Detection Algorithm for Intrusion Detection System in Wireless Sensor Networks" in the 3rd International Conference on Eco-friendly Computing and Communication Systems ICECCS 2014 held at NITK, Surathkal during December 18th - 21st, 2014.

- Presented a paper titled "Guard Node based Monitoring System for Wireless Sensor Networks" in the International Conference on Design and Application of Structures, Drives, Communicational and Computing Systems at KLNCIT, Madurai held during November 29 – 30, 2013

- Presented a paper titled "False Misbehavior Elimination in Watchdog Monitoring System using Change Point in Wireless Sensor Networks" in the International Conference on Advanced Engineering and Technology held on March 10, 2013

- Presented a paper titled "Level Partitioning of Nodes to Enhance the Network Lifetime during Intrusion Detection in Wireless Sensor Networks" in the International Conference on Advanced Engineering and Technology held on March 10, 2013

- Presented a paper titled "Counter Based Wormhole Detection algorithm in Wireless Sensor Networks" in the International Conference on Smart Technologies (ICST 2013) held during January 03 – 05, 2013

- Presented a paper titled "Comparison between Local and Global Distance based Clustering Technique to improve the Network Life Time in WSN" in the International Conference on Science Engineering and Technology held during November 8 – 9, 2012

- Presented a paper titled "Traffic Analysis based Wormhole Detection Algorithm in WSN" in the International Conference on Electronics Communication and Information system (ICECT 2012) held during November 02 -03, 2012

- Presented a paper titled "Efficient block cipher Encryption algorithm for Wireless Sensor Network" in the International Conference on Advanced Computing Technology organized by JKKN College of Engineering and Technology, Namakkal held during March 09 – 10, 2012

- Published a paper in the International Conference titled "An Improved Architecture for Shift-Or Algorithm for Pattern Matching in FPGA for Intrusion Detection" at NITTE, Karnataka held during May 04, 2011

- Presented a paper in the International Conference titled "Deterministic finite automata for pattern matching in FPGA

for Intrusion Detection" held at NCE, Maruthakulam during March 18- 19,2011 (included in the ICCCET 2011 Conference Proceedings and IEEE Xplore digital library)

- Presented a paper titled "A Novel pattern Matching Algorithm for Network Intrusion Detection System using Pattern Matching on FPGA in the Second National Conference on Industrial Technology organized by EIE Department of Bannari Amman Inst. of Tech, Satyamangalam held on March 05, 2011

- Presented a paper titled "Enhancing the security of PON against signal injection attacks" in the National Conference on "Information, Communication and Electrical Technologies" held at Velammal College of Engineering & Technology, Madurai during February 27 - 28, 2009

- Published a paper titled "Making ICT rural friendly" in the International Conference on "Knowledge Networking in ICT era" held at B.S. Abdur Rahman Crescent Engineering College, Chennai during January 22 - 24, 2009

- Been the Co-author for the paper titled "Deploying a Security Package for Integrity of Data" in the International Conference on "Knowledge Networking in ICT era" held at B.S. Abdur Rahman Crescent Engineering College, Chennai during January 22 - 24, 2009

- Been the Co-author for the paper titled "Engendering a search engine to raise the economical status of rural labors" in the International Conference on "Knowledge Networking in ICT era" held at B.S. Abdur Rahman Crescent Engineering College, Chennai during January 22 - 24, 2009

- Published a paper titled "Challenges in Leadership" in the National Seminar on "Strategic Changes and Challenges in Management" held on October 18, 2008, organized by the department of Business Administration, Annamalai University

- Published and presented a paper titled "Values in Professional education" in the ISTE 11th Annual Convention and State Level Seminar on "Autonomous Technical Institutions and Universities in the context of Higher Level Knowledge Creation" held on September 27, 2008 at Mepco Schlenk Engineering College, Sivakasi

- Been the Co-author for the paper titled "Deploying Institute and Industry Interaction" in the ISTE 11th Annual Convention and State Level Seminar on "Autonomous Technical Institutions and Universities in the context of Higher Level Knowledge Creation" held on September 27, 2008 at Mepco Schlenk Engineering College, Sivakasi

- Published a paper titled "Flexible weighted Fair queuing for data networks" in the National Conference on "Recent trends in Communication techniques" (NATCON '08) held on April 3, 2008 at Noorul Islam College of Engineering, Thuckalay

- Published a paper on "Hyper-cuts Technique of Packet Classification" in a National Conference on "Internet and Multimedia Communication" (IMC-2008) during March 27-28, 2008 at Noorul Islam College of Engineering, Thuckalay

- Published a paper on "Hungarian Method of Fair queuing in Wireless Data Networks" in a National Conference on "Contemporary VLSI on Wireless technologies" (CONTEECE'08) during March 13-14, 2008 at Dr. M. G. R. University, Chennai

- Published a paper on "Ethics in Professional education" in the 37th ISTE Annual Convention and National Seminar on "Excellence in Technical education through Innovation" held at Manipal Institute of Technology, Manipal during December 17 - 19, 2007

- Presented a paper on "Throughput Maximization in Wireless Ad-Hoc Networks Using Joint Power Control and Scheduling Algorithms" in the National Conference on "Emerging Trends in Technology" (NCET '07) organized by Kalasalingam University on April 23, 2007

- Presented a paper on "Performance analysis of Non-Directed Infrared links for high capacity wireless LANs" in a National Conference on "Emerging Trends in Communication systems" held at Arunai Engineering College, Thiruvannamalai on April 7, 2006

- Presented a paper on "FDTD Modeling and Simulation of ECPW as on chip Interconnects" in a National Conference (NCRTAC-05) on "Recent Trends in Advanced Computing Techniques" held at BIHER, Chennai during January 27 – 29, 2005

- Presented a paper titled "A Comparative Study of Boundary conditions and Parameter Extraction of Planar Transmission Line structures using FDTD " in ISTE 7th Annual Convention and National Seminar (RAGAME-2004) on "Recent Advances, Growth and Achievements in Modern Engineering" held at Pondicherry, during November 26-27, 2004

- Presented a paper on "Problem Based Learning" in a National Conference on "Emerging Trends in Engineering Education" held at Government Polytechnic, Aurangabad during October 25-26, 2002