



Bimal Kumar Meher, Ph.D.

Designation : Associate Professor

Department : Department of Computer Science and Engineering
(JOINED THE INSTITUTE IN 2005)

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RESEARCH INTERESTS

- ✓ Cryptography Architecture
- ✓ Network Security
- ✓ Elliptic Curve Cryptosystem
- ✓ Multifactor Authentication

Academic Qualifications

Ph. D. (Computer Science), Utkal University, Bhubaneswar, Odisha, India

M.Tech. (Computer Science), Utkal University, Bhubaneswar

M. Sc. (Electronics) Berhampur University, Berhampur, Odisha

Teaching Experience/Industrial Experience/Research Experience

- ✓ 23 years Teaching
- ✓ 06 years of Research

PUBLICATIONS

JOURNAL & CONFERENCES

- [1]. **B. K. Meher**, "A Study of Suitability and Effectiveness of Various Implementation Options of Finite Field Arithmetic on Elliptic Curve Cryptosystem," International Journal of Computer Theory and Engineering (IJCTE), Vol.1, No.4, pp.389-393 October 2009.
- [2]. **B. K. Meher** and P. K. Meher, "A New Look-Up Table Approach for High-Speed Finite Field Multiplication," International Symposium on Electronic System Design (IEEE Computer Society Press), Available in IEEE Xplore, Kochi, India, pp.51-55 December 2011.
- [3]. **B. K. Meher** and P. K. Meher, "An Efficient Look-up Table-based Approach for Multiplication over GF(2^m) Generated by Trinomials," Journal of

Circuits, Systems and Signal Processing, Springer, NewYork, Vol.32, No.6, pp.2623-2638, January 2013.

- [4]. C. Y. Lee, C. S. Yang, **B. K. Meher**, P. K. Meher, and J. S. Pan, "Low-Complexity Digit-Serial and Scalable SPB/GPB Multipliers over Large Binary Extension Fields using $(b,2)$ -Way Karatsuba Decomposition," IEEE Transactions on Circuits and Systems-I, Vol. 61, No. 11, pp. 3115-3124, November 2014.
- [5]. **B. K. Meher** and P.K. Meher, Analysis of Systolic Penalties and Design of Efficient Digit-Level Systolic-like Multiplier for Binary Extension Fields, "Journal of Circuits, Systems and Signal Processing, Springer, NewYork, Vol. 38, No. 2, pp. 774-790, July 2018.
- [6]. **B. K. Meher** and Ruhul Amin, "A Location-based Multi-factor Authentication scheme for Mobile devices," International Journal of Ad Hoc and Ubiquitous Computing, 2022 (in Press)

ANY OTHER

Awards

1. 2013 Sydney R. Parker Best Paper Award in the area of Signal Processing by Circuits, Systems and Signal Processing (CSSP), Springer
2. 2013 M.N.S. Swamy Award for being the best paper amongst all the papers published in 2012 and 2013 in CSSP, Springer
3. Best PhD Thesis award for the year 2016 by Computer Society of India (CSI) during the Annual convention of CSI in 2018.

Book Chapter Conferences attended