

RESUME

Dr. AKHILESH KUMAR

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Dept. of Electronics and Communication Engg.

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Academic Qualification:

| Sl. no. | Degree | Subject | University /Institution | Year | % of marks |
|----------------|---------------|--|--|-------------|-------------------|
| 1. | Matriculation | Science | Bihar Secondary School Examination Board | 1976 | 65 |
| 2. | Intermediate | Science | Magadh University Bodhgaya | 1978 | 61 |
| 3. | B.Sc. Engg. | Electrical Engg.. | Bhagalpur University Bhagalpur | 1986 | 63 |
| 4. | M.Sc. Engg. | Power System | Bihar Institute Of Technology Sindri | 1993 | 86 |
| 5. | Ph.D. | Analysis Of Self-Complementary Broad Band Antennas | Magadh University Bodhgaya | 2016 | |

PhD Topic : “Analysis Of Self-Complementary Broad Band Antennas”

Summary of Ph. D Work :

The thesis introduces a novel, fast, efficient and global optimization algorithm with the help of CST Microwave Studio hybrid software Optimization. The proposed algorithm is implemented to synthesize the linear and non-linear sparse array pattern having a minimum side lobe level (SLL), and null control with constraint on beam width to minimize the interference effect by optimizing the element parameters such as position-only, amplitude-only, phase-only and complex weight (the amplitude and the phase). Several examples of linear and non-linear array synthesis are considered to illustrate the efficacy of the proposed algorithm. The results are compared with proposed and standard values. algorithms etc. Simulation studies demonstrate that this algorithm achieves the goal.. The simulation results demonstrate the improved performance of algorithm compared to other algorithms in terms of null control, minimum SLL, beam width control and the rate of convergence.

PhD Supervisor

Dr. A. K Sinha
Professor & Head
Dept. of Electronics
S.G.G.S.College, Patna

Work experience (in chronological order):

- 1) **i) Positions held** : Assistant Professor
ii) Name of the Institute : Bihar Institute Of Technology
Sindri
iii) Period : 1989-1997
- 2) **i) Position held** : Associate Professor
ii) Name of the Institution : National Institute Of Technology
Jamshedpur
iii) Period : 1998-till today
- 3) **Temporary Assignment less than six months:**

Position held

Head of Dept. of Electronics & Comm.
Engg. , Chief Warden, Chairman(Hall
Management Board) of Dept. of
Computer science & Engg.

- 4) **Permanent Assignment for full term of three or more than three years:**

Head of Dept. of Electronics & Comm.
Engg., Warden, Chairman of Academic
Committee, Chairman of Purchase
Committee, Prof. In charge of Examination
under Ranchi University of the dept. Member of
local management committee, DAV ,NIT
Jamshedpur. Member of
different committees.

Prize & Honor

Got first prize for paper presentation in National Conference held at I.S.M., Dhanbad
in the year 2008.

a. Certificate

- Chaired Technical Session of National Conference at I.S.M, Dhanbad

Jharkhand in 2008 and 2009 under Electronics engineering Dept and Computer science

Dept Respectively

- Workshop on Digital Signal Processing for two week organized by I.I.T.Professor
at NIT Jamshedpur.

- Workshop on VLSI for two week organized by IIT Professor at IIT Kgp.
- Chaired Technical Session of National Conference at I.S.M, Dhanbad
Jharkhand in 2009 under Computer Science Engineering Dept.
- National Workshop on VLSI & Embedded system based design from 6 to 8 March
2009.
- TEQIP Sponsored short term training program me on Metrology for engg. From
17 to 19 July, 2006.
- Chair Technical Session at RVS College Jamshedpur 2016.

Others:

- Reviewed Book of Digital Communication of Mc Grawhill Publication.
- Reviewer of International Journals.
- Member of Editorial & Advisory committee of International journals & National
conferences.
- Qualify the GATE exam in 1990.

Publications

a. International Journal

- Akhilesh Kumar and et al, “4G’s New horizon of Opportunities: Technology beyond
3G. MIT Publications, Vol. II, dt. 19.4.11 April 2011.
- A.Kumar, and et al., “Design and noise analysis of biquad gic notch filter in 0.18 μ M
CMOS Technology. IJAET, Publication ISSN:2231-1963, Vol 2, No. 9-September 2011.
- A.Kumar and et al., “ Performance evaluation of a Router for FPGA based crossbar
Noc(Network on chip) Architecture”, IJCIIS, Publication ISSN:1837-7823, Vol 1.
September 2011.
- A.Kumar and et al. “ Design of low power low noise biquad gic notch filter in 0.18 μ M
CMOS Technology”. IJAET Publication, ISSN:2231-1963 Vol. 1 Nov. 2011.

- A. Kumar and et al. “ Functional coverage analysis of OVM based verification of H.264 CAVLD slice header decoder.” IJAET Publication,ISSN:2231-1963 Vol. 1 Nov. 2011.
- A. Kumar and et al. “ Design and verification analysis APB3 Protocol with coverage .” IJAET Publication,ISSN:2231-1963 Vol. 1 Nov. 2011.
- A. Kumar and et al. “Coverage analysis in verification of Total Zero decoder of H.264 CAVLD.” IJAET Publication,ISSN:2231-1963 Vol. 1 Nov. 2011.
- A. Kumar and et al. “An application of direct modulation to generate SPWM Waveform using VHDL for FPGA interfaced H-Bridge power inverter.” IJCIIS, Publication ISSN: 1837-7823, Vol 2. December 2011.
- A. Kumar and et al. “Estimation of motion among shifted images at coarse and fine levels. IJCIIS, Publication ISSN:1837-7823, Vol .2. December 2011.
- Richa Sinha, A.Kumar & A.K.Sinha. “Verification analysis of AHB-LITE protocol with coverage.” IJAET Publication,ISSN:2231-1963 Vol. 1 January 2012
- M.K. Jha, Richa Sinha &A. Kumar “Design and verification analysis of AVALON Interrupt interface with coverage report.” IJAET Publication, ISSN: 2231-1963 Vol. 1 January 2012.
- P. V. K. Reddy, A.Kumar & A. Anand“FPGA based gate and RTL level fault injection technique and tool for fault tolerance designs”. IJCIIS, Publication ISSN: 1837-7823, Vol .2. March 2013.

b. National Conference:

- Akhilesh Kumar and et al, “4G’s new horizon of Opportunities: Technology beyond 3G (2009) at NIT Rourkela, Odisha, India.
- Akhilesh Kumar and et al, Multipurpose Ultra-Wideband at NIT Rourkela, Odisha, India.
- Akhilesh Kumar and et al FPGA based SPWM waveform generator for sine wave inverter 2009 at ISM Dhanbad.

- Akhilesh Kumar and et al “FPGA based intelligent washing machine using Fuzzy logic” 2009 at ISM Dhanbad.
- Akhilesh Kumar and et al “SDMA system based improvements” 2009 at ISM Dhanbad.

Personal:

Date of Birth : 04.09.1964

Father’s Name : Late Narayan Singh

Address for Correspondence

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