Dr. Durgesh Nandan

Cell: 09131420165 / 09329483287

E-Mail: <u>prof.durgeshnandan@gmail.com</u> <u>durgesh.nandan@accendere.co.in</u>



## **Career Summary**

A result-oriented leader with more than 7 years of teaching experience with effective communicator, exceptional presentation skills & abilities in leading cross-cultural teams & establishing relationship.

Previously working as a role of faculty under SMDP-C2SD project at ECE Department in National Institutes of Technology, Patna (Bihar).

Currently working as a role of Research Mentor in CL educate ltd.

#### Education

Examination	School /college / Board / University	Duration	Percentage /CGPA
PhD	Jaypee University of Engineering & Technology, Guna	2014- 2018 (08-10-2018)	8 (C.W.)
PGDIPR	IGNOU	2018	Enroll
M.TECH (MEVD)	Technocrats Institutes of Technology, Bhopal (R.G.P.V)	2010 - 2013	79.4 % (First with Distinction.)
B.E.(EC)	Bansal College of Engineering, Mandideep (R.G.P.V.)	2005 - 2009	70.34% (First)
High Secondary (10+2)	A.N.D.C, Shahpur Patory (Bihar Board)	2001	76.3% (First with Distinction.)
High School (10 <sup>th</sup> )	G.B.H.S, Shahpur Patory (Bihar Board)	1999	61.2% (First)

# **Employment Details**

# Research:

- Currently worked as a role of the **Research Mentor in CL educate Ltd** from 21<sup>th</sup> September 2018 to till date.
- Worked as a full-time research scholar on the research topic of "Design and analysis of an efficient architecture of logarithmic multiplier and its applications" in Jaypee University of Engineering and Technology, Guna (MP) from 07<sup>th</sup> August 2014 to 21 April 2018.

#### **Teaching:**

• Worked as a faculty under SMDP-C2SD project at ECE Department in National Institutes of Technology, Patna (Bihar) from 25th April 2018 to 20th September 2018.

- Worked as an **Asst. professor** in IASSCOM fortune institutes of technology, Bhopal (M.P) from 5<sup>th</sup> April 2013 to 31<sup>st</sup> July 2014.
- Worked as a **Lecturer** in IASSCOM fortune institutes of technology, Bhopal (M.P) from 2<sup>nd</sup> July 2009 to 17<sup>th</sup> Sept. 2010.

## Other work:

- Worked as a **Head of department** (E.C) in IASSCOM fortune institutes of technology, Bhopal (M.P) from 5<sup>th</sup> April 2013 to 31<sup>st</sup> July 2014.
- Worked as an **Asst. Exam controller** in IASSCOM fortune institutes of technology, Bhopal (M.P) From December 2013 to June 2014.
- Worked as Quantitative aptitude trainer in Engineering College for preparing campus interview.

#### **Area of Research Interest**

- Image Processing
- VLSI Systems Design for Signal Processing Algorithms
- Hardwar security and Cryptography
- Reversible Logic for Signal Processing & Quantum computing
- Artificial intelligence
- VLSI Systems Design for Speech Processing Algorithms

#### **Area of Subject Interest**

- Basic of electronics
- Digital signal processing
- Electronic devices
- Computer arithmetic
- CMOS and ASIC VLSI design
- Digital electronics

#### **Research Publication**

#### Journal Paper:

- 1. **Durgesh Nandan**, Jitendra Kanungo and Anurag Mahajan, "An Efficient VLSI architecture design for logarithmic multiplication by using the improved operand decomposition," Elsevier, VLSI the integration journal, Vol. 58, pp. 134-141, June 2017, DOI:10.1016/j.vlsi.2017.02.003 (SCI).
- 2. **Durgesh Nandan,** Jitendra Kanungo and Anurag Mahajan, "An errorless Gaussian filter for image processing by using expanded operand decomposition logarithm multiplication," *Springer, Journal of ambient intelligence and humanized computing*, DOI:10.1007/s12652-018-0933-x, 2018 (SCI, In Press).
- 3. **Durgesh Nandan**, Jitendra Kanungo and Anurag Mahajan, "An efficient VLSI architecture design of Leading One Detector," International journal of pure and applied mathematics, Vol.118 (14), pp. 267-272, 2018 (Scopus).
- 4. **Durgesh Nandan,** Jitendra Kanungo and Anurag Mahajan, "65 years journey of logarithm multiplier," International journal of pure and applied mathematics, Vol.118 (14), pp. 261-266, 2018 (Scopus).

- 5. **Durgesh Nandan**, Mahajan, A. and Kanungo, J. (2018), "An efficient architecture of Iterative Logarithmic Multiplier," *International journal of engineering & technology (UAE)*. Vol.7 (2.16), pp. 24-28, 2018 (Scopus).
- 6. **Durgesh Nandan**, Anurag Mahajan and Jitendra Kanungo, "Implementation of Leading One **Detector based on reversible logic for logarithmic arithmetic,**" International Journal of Computer Applications, Vol.173 (8), pp. 40-45, Sep. 2017.
- 7. Parvin Akhter, Sachin Bandewar, **Durgesh Nandan**, "Logarithmic Multiplier: An Analytical Review" International Journal of Engineering Research, Vol.5 (8), pp. 721-723, August 2016.

## **International Conference paper:**

- 8. **Durgesh Nandan**, Anurag Mahajan and Jitendra Kanungo, "**An Efficient antilogarithmic converter by using 11-regions error correction scheme,**" IEEE 4th International Conference on Signal Processing, Computing and Control (ISPCC 2017), JUIT, Waknaghat, pp. 118-121, 21-23 Sep.2017 (**Scopus**).
- 9. **Durgesh Nandan**, Jitendra Kanungo and Anurag Mahajan, "An efficient VLSI architecture for Iterative Logarithmic Multiplier," IEEE 4<sup>th</sup> International conference on signal processing and integrated networks (SPIN), Noida, pp.419-423, Feb.2017 (Scopus).
- 10. **Durgesh Nandan**, Jitendra Kanungo and Anurag Mahajan, "**An Efficient VLSI architecture design for antilogarithmic converter by using the error correction scheme**," IET International conference on signal processing (ICSP), SATI, vidisha, 11-13 Nov. 2016, DOI: 10.1049/cp.2016.1445.
- 11. Sachet Jamliya, Anurag Mahajan, Abhishek Choubey and **Durgesh Nandan**, "**An efficient VLSI architecture of multiplier-less 1-D DWT using CSD technique**," IET International conference on signal processing (ICSP), SATI, vidisha, 11-13 Nov. 2016.
- 12. Khushboo Patel, Vibha Tiwari, and **Durgesh Nandan**, "Crosstalk mitigation of network on chip: an analytical review" IEEE International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), Chennai, pp. 378-383, 3-5 March 2016, DOI: 10.1109/ICEEOT.2016.7755393 (Scopus).
- 13. **Durgesh Nandan** and Shivendra Singh, "The comparative result of symmetric encryption techniques," Springer indexed ICICIC Global, Chennai, Dec. 2012.
- 14. **Durgesh Nandan** and Shivendra Singh, "Key Reconfiguration Scheme for DES Algorithm," Springer indexed ICICIC Global, Chennai, Dec. 2012.

# **Professional Trainings Attended**

- Attended a one-week GIAN course on "Logic design under paradigm of rebooting computing" from 25-29 Dec.2017 at IIT Roorkee.
- Attended a one-week course on "Hands on session on VLSI design tools" from 18 -22 Dec. 2017 at NIT Delhi.
- Attended UGC funded a one-week workshop on "VLSI design & sensors in systems" from March 20-25, 2017 at School of physics, University of Hyderabad, Hyderabad.
- Attended a two days National workshop on "MATLAB application in science & engineering" from February 11-12, 2017 at JUET, Guna.
- Attended a two-week GIAN course on "VLSI Architectures for Signal Processing and machine learning" from 19-30 December 2016 at IIT Kharagpur.
- Attended in National workshop on "High-performance VLSI Architectures for Digital Signal Processing Applications: Design and Implementations" from 9-11 September 2016 at JUET, Guna (MP).

- Attended in faculty recharge program on "VLSI Design" from 14-16 July 2015 at JUET, Guna (MP).
- Attended a two days National workshop on "Low Voltage and Low Power VLSI Design" from 22-23 August 2014 at JIIT, Noida.
- Attended a two- week ISTE workshop on "SIGNAL & SYSTEM" under the national mission on education through ICT which is organized by IIT, Kharagpur from 02-12 January 2012.
- Attended a two- week ISTE workshop on "ANALOG ELECTRONICS" under the national mission on education through ICT which is organized by IIT, Kharagpur.

#### **Research Mentor activities**

## **Reviewer of SCI Journal:**

- Journal of Circuits, Systems and Computers, World Scientific.
- Circuit, systems and signal processing, Springer

### **Reviewer of Scopus Journal:**

- Biomedical research, Allied Academies Journals.
- International journal of engineering and technology innovation.
- The Institution of Engineers (India) Series B.

Reviewer of International conference: (1) ICSPT'2013, (2) ICMASCTS'2014, (3) ICSIN'2014, (4) ICSPIE'2014, (5) ICTMASCS'2014, (6) ICSPCT 2014, (7) IJ--IS, (8) WSCNIS'2015, (9) WCI-2015, (10) ADMMET'2015, (11) ICCTIS'2015, (12) GAMEPEC 2015, (13) ICCEA'2015. (14) ISySM'2015, (15) PIAMSE'2015, (16) ICED 2016, (17) AVAREIT'2016, (18) AREITIC'2016, (19) ARECAS'2016. ARONCAS'2016, (21) APPEMSE'2016. (20)(22)AR2BIO-ICEMIT-RAIEIC'2016, (23) ICCCSIT-2016, (24) ICCITR'2016, (25) WCCAIS'16, (26) COMSIT'2016, (27) ENVICET'2016, (28) SCIEMATHIC'2016, (29) SYMINTECH'2016, (30) PROCSIT'2016, (31) WICOIS'2016, (32) I2BM'2017, (33) APPEMSE'2017, (34) ICACCI-2017, (35) ICOBSS'2017, (36) ICOCOE'2017, (37) SYMINTECH'2017, (38) CICN 2016, (39) ICCDMTA 2017, (40) PIAMSE'2017, (41) RENCES'2017, (42) I4CT'2015, (43) I4CT'2016, (44) SIRS-2015, (45) SIRS-2017, (46) SIRS-2018, (47) WCITCA'2015, (48) WCITCA'2016, (49) ISTA-2018. TPC Member: (1) ICITA'2014, (2) GSCIT' 2015, (3) ENCINS' 2015, (4) ICCAAD' 2015, (5) ICCVIA' 2015, (6) IBMSGS' 2015, (7) GSCIT 2016, (8) ISTA-2017, (9) WSMEAP' 2015, (10) WSMEAP 2016, (11) WSCAR' 2015, (12) WSCAR 2016, (13) WSCAR 2017

#### Computer skills

Languages : c, c<sup>++</sup>, MATLAB, VERILOG & VHDL.

Operating Systems : Windows 2000/XP/2007.

Software used : MATLAB, Xilinx ISE, Vivado, Mentor graphics, Cadence & Synopsys.

#### **Awards and Achievements**

- JSS Research Fellowship for PhD in 2014.
- Selected for PhD in 1) J.P university, Guna; 2) KIIT, Odhisa.
- GATE 2014 qualify with GATE score 357.
- "Best of best" award in 2013 at I.F.I.T, Bhopal.
- Score 98.7 percentile in MAT 2009.
- Selected software companies like Infosensys Pvt. Ltd & Ilnathan technology Pvt. Ltd.

#### **Personal Vitae**

Date of Birth : 28. Feb. 1984

Address : 131, Chhawni, Mangalwara road, Bhopal (M.P)

#### References

# Dr. Jitendra Kanungo

Assistant Professor (SG)

ECE Department

Jaypee University of Engineering & Technology, Guna (M.P), India-473226

Tel: (+91) 8959005243

Email: jitendra.kanungo@juet.ac.in

# Dr. B.K. Mohanty

Professor & Head

ECE Department

Mukesh Patel School of technology management & engineering

NMIMS University, Shirpur campus (Maharashtra), India

Tel: (+91) 94252135311

Email: basantkumar.mohanty@nmims.edu

# Dr. Anurag Mahajan

Assistant Professor (SG)

ETC Department

Symbiosis Institute of Technology, Pune (Maharashtra), India.

Tel: (+91) 9406667722

Email: anurag.mahajan@sitpune.edu.in