

# CURRICULUM-VITAE



NAME	:	<b>PROF. ASHWANI KUMAR</b>
FATHER'S NAME	:	SH. DHARAM PAL
DATE OF BIRTH	:	26.10.69
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NATIONALITY	:	INDIAN
WHETHER BELONG TO SC/ST/OBC	:	NO

## EDUCATIONAL QUALIFICATIONS

DEGREE	INSTITUTION/ UNIVERSITY	YEAR	SPECIALIZATION
Ph.D.	Delhi College Of Engineering, Delhi University	2000	Digital Signal Processing
M.E.	Delhi College Of Engineering, Delhi University	1993	Electronics and Communication
B.E.	Delhi College Of Engineering, Delhi University	1991	Electronics and Communication
MBA	Faculty of Management Sciences, Delhi University	1998	Technology Management

**PRESENT POSITION:**

**Professor and Head, Academics, IGIT, Guru Gobind Singh Indraprastha University, Delhi, in the pay scale of Rs 37,400-67,000(PB-4) with grade pay of Rs 10,000/-.**

**EXPERIENCE:- More than 20 years.**

<b>DESIGNATION</b>	<b>ORGANISATION</b>	<b>PERIOD</b>
Professor & Head, Academics	IGIT , GGSIP University, Delhi	Feb'08 till date
Senior Program Manager	C-DOT, Delhi R&D Center, Ministry of communication & IT, Govt. of India	Oct'91 to Jan'08

**NATURE OF EXPERIENCE:**

**I. ACADEMIC**

- Teaching B.Tech /M.Tech/ MBA courses in the field of Engineering & Management.
- Setting up of Incubation Centers in collaboration with Govt. Org. visiting faculty in the field of Strategic Management, Technology Marketing & Optical Communication.
- Responsible for designing of courses in Engg & Technology and Management for colleges affiliated to IP University
- Responsible for all academic related activities of the Institute.
- Smooth conduct of Examinations and teaching

- Member of Audit/Inspection committees of Universities/AICTE

## **II. Training & Placement**

- Instrumental in providing training and placement to students
- Analyzing the training needs of students and faculty
- Industry interface for better Placements & Designing courses in tune with requirement of industry

## **III. ADMINISTRATION**

- Head of institution, in the capacity of **Principal, IGIT & Dean (USET)** responsible for all administrative, Financial and Technical activities
- Providing Leadership to the faculty and staff to undertake consultancy assignments, new courses and focus on Research.
- Designing of Creative and innovative attendance monitoring system.
- Creating an Environment for Learning, Research, new methods of teaching with focus on research and publications.

## **IV. TELECOM – RESEARCH EXPERIENCE**

### **TECHNOLOGY DEVELOPMENT / R & D**

#### **DESIGN AND DEVELOPMENT OF:-**

- **2/8 OLTE PDH MUX:**

As a part of the team, which finalized the architecture of the whole system. The system was later developed, tested and technology approval obtained from the TEC.

- **C-DOT's STM-1 system:**

- As a part of the core team which initiated the development of the C-DOT's STM 1 system.

- Involved in the conceptualization, finalization of the architecture, system engineering.
- Led the development of Optical Interface card of the system.
- Interacted with TEC for getting the technology approval.

- **Fiber Access System:**

Led the development of the entire system right from conceptualization to evaluation of different architectures following by leading a team of hardware engineers for the complete h/w development.

- **Optical Amplifier:**

- Interacted with the internal validation group for getting the system tested followed by interaction with the TEC for technology approval.
- Was instrumental in getting the field trial of the system successfully completed in the DOT network.

- **DWDM/CWDM:**

- Led the development of these systems, from the beginning, including the hardware & software development. These systems were offered to TEC for technology approval, which was successfully carried out under my leadership.
- Instrumental in the successful completion of the field trial of the DWDM & CWDM system in BSNL & MTNL network respectively.
- The DWDM link is now operating between Delhi & Jaipur.

- **IM-PCS**

Was instrumental in the successful field trial done at Kolkata and Patna as C-DOT acted as the integrator of this system and field trial was carried out at various locations in India.

## **V. TECHNOLOGY MARKETING & COMMERCIALIZATION**

### **SENIOR PROGRAM MANAGER(Business Promotion and Marketing) and IPR CELL**

- MOU's for transfer of technology.
- SLA's for systems in operation.
- Preparation of tender documents/ evaluation of proposals.
- Technology Forecasting.
- Interacting with prospective customers to provide them with Turn Key and Customized Solutions.
- Creation of an IPR Cell.
- Identifying Patentable Products And Filing Patents

## **VI. TECHNOLOGY SUPPORT AND GENERAL ADMINISTRATION**

### **SENIOR PROGRAM MANAGER (HR and Administration)**

- Introduction of new HR Policies & Technical Marketing, Design of Technical Brochures.
- Participation in Exhibitions & Seminars in India & Abroad.
- New administrative policies for better facility Management services.
- Creation of Hindi cell in C-DOT and making it effective and functional.
- Responsible for canteen, housekeeping, travel, security, vigilance,
- Purchase, PR, transfer of technology and maintenance of infrastructure.
- Publication of News Letter, Brochure and annual reports

## **VII. CONSULTANCY**

- Provided consultancy to various academic institutes/groups for setting up of engineering/management Institutes.
- Involved in various consultancy assignments during C-DOT

## **VIII. TRAINER ACTIVITIES**

Conducted training on

- IPR
- Project Management
- Technology Management

## **IX. Role in professional Activities**

- Member, Publications Committee, Delhi Management Association
- Member, Project Review Committee, CDC

## **X. INTELLECTUAL PROPERTY**

- Patent filed on “**A versatile FIR Digital Integrator**”

## **XI. LIST OF PUBLICATIONS IN REFERRED JOURNALS**

1. **Ashwani Kumar** and Balbir Kumar, ‘Analytical design of optimum FIR digital integrators’, **IEICE Trans on Fundamentals of Elect, Comm & Comp. Science, Vol E79-A, No.6, pp. 764-767, June 96.**
2. **Ashwani Kumar**, Balbir Kumar, and D. Roy Choudhary, ‘On the design of linear phase, FIR integrators for mid-band frequencies’, **IEEE Trans, Signal Processing, Vol 44, No.10, pp.2391-2395, Oct.96.**
3. **Ashwani Kumar**, and B. Kumar, “Design of Liner phase FIR integrators or degree  $r$ ,  $r=1,2,3,\dots$ , for midband frequency range’, **Circuits Systems Signal Processing, Vol. 16, No. 5, pp. 537-545, 1997.**

4. **Ashwani Kumar** and **B. Kumar**, "Design of efficient Fir filters for amplitude response  $c$  by using universal weights,' **IEEE Trans on Signal Processing, Vol. 47, No.2, pp 559-563, February 1999.**
5. **Ashwani Kumar**, and **B. Kumar**, 'FIR linear-phase approximations of frequency response  $1/(j\omega)$  for maximal flatness at an arbitrary frequency,  $\omega_0$ ,  $0 < \omega_0 < \pi$ ,' **IEEE Trans. on Signal Processing, Vol. 47, No.6, pp. 1772-1775, June 1999.**
6. **Ashwani Kumar**, and **B. Kumar**, 'Linear-Phase FIR approximation of magnitude response  $|1/\omega|$  for maximal flatness at an arbitrary frequency  $\omega_0$ ,  $0 < \omega_0 < \pi$ , **Circuits Systems Signal Processing. Vol. 18, No. 5 pp. 445-455, 1999.**
7. **B. Kumar**, **Ashwani Kumar** and **D. Roy Choudhary**, 'Universal weights for maximally flat FIR approximations of amplitude response.  $|1/\omega|$  ,' **IETE Journal of Research, Vol.46 No.3, pp. 105-112, May-June 2000.**
8. **Ashwani Kumar**, and **B. Kumar**, 'Efficient linear-phase FIR maximally flat error approximations for the amplitude response  $|1/\omega^r|$ ,  $r=1,2,3,\dots$ , and a versatile realization,' **Circuits Systems Signal Process. Vol. 19. No.6 567-580, 2000.**
9. **Shobha Sharma**, **Ashwani Kumar** et al, "Nanoscale CMOS SRAM:Challenges,new techniques and technology",Masam **Journal of reviews and surveys,Vol1, issue1,page1-9 sept09.**
10. **Shobha Sharma**, **Ashwani Kumar** et al,"CNTFET based circuits: challenges, solutions and Analysys",**IEEE Delhi section-Emerging technologies: nanotechnology and cryogenics,oct30-31 2009.**

## **XII. Publications in Conferences and Others**

1. **Ashwani Kumar** and B. Kumar, 'Analytical design of optimum FIR digital integrators,' Proceedings JTC-CSCC' 95, July 18-20, Kumamoto, Japan, pp. SPI-1/1-4, July 1995.
2. **Ashwani Kumar** and B. Kumar, 'Analytical approach to design of linear phase, FIR integrators of 1<sup>st</sup> and higher degrees, for midband frequency range', **Proceedings Second National Conference on Communications (NCC-96)**, 16-18 Feb 1996, Bombay, pp. 83-86, Feb. 1996.
3. **Ashwani Kumar**, and Balbir Kumar, 'Linear phase, FIR approximation of a rational frequency response,  $H(\omega)$ , with maximal flatness at an arbitrary frequency  $\omega_0$ ,  $0 < \omega_0 < \pi$ ', National Conference on Communications 1997 (NCC 1997) Jan 31-Feb 2, 1997, IIT Madras India, pp.67-70, Jan-Feb 97
4. Akash Tayal, **Ashwani Kumar** "A Decision Theory based Multimodal Biometric Authentication System using Wavelet Transform". *International Conference of Machine Learning and Cybernetics (ICMLC) 2009 at Baoding, China*, (Will be available as IEEE Xplore)
5. Akash Tayal, **Ashwani Kumar**. "A Multimodal Biometric System: Iris Recognition, Speech Identification and Decision Theory". *International Workshop on Non Linear Dynamics and Synchronization INDS'09, Klagenfurt, Austria*, (Will be available as IEEE Xplore)
6. Akash Tayal, **Ashwani Kumar** . "A Multimodal Iris and Speech biometric system using Decision Theory and Wavelet Transform". *Artificial*



*Intelligence and Pattern Recognition Conference, 2009 at Orlando, Florida, U.S.A,*

7. Akash Tayal, **Ashwani Kumar**. “A Multimodal Iris and Speech biometric system using Decision Theory and Wavelet Transform”. *International Conference on Security and Identity Management (SIM) sponsored by Research Council of UK.*
8. Akash Tayal, **Ashwani Kumar**. “Watermarking with Multilevel Wavelet Decomposition: Rationality Leads to Conflict Resolution”. *International Conference on Security and Identity Management (SIM) sponsored by Research Council of UK*
9. Akash Tayal, **Ashwani Kumar**. “A Multimodal Biometric System Coupling Iris Recognition and Speaker Identification systems through Decision Theory”. *International Conference on Anti-counterfeiting, Security and Identification, Hong Kong.*
10. Akash Tayal, **Ashwani Kumar**, Ankita Lathi, Shweta “Modeling and Analyzing Common Electronics Applications using Game Theory”. *22<sup>nd</sup> International Conference on VLSI Design / 8<sup>th</sup> International Conference on Embedded System, Delhi.*

**(Prof. Ashwani Kumar)**

## **References:**

### **Prof. K.K.Aggarwal**

***Chancellor Lingaya's University, Faridabad***

***Former-Vice Chancellor, GGSIP University, Delhi***

**Contact :**

***Campus Nachauli, Jasna Road, Neharpar Faridabad, Faridabad, Haryana 121002***

### **Prof. P. B. Sharma**

***Vice Chancellor, Delhi Technological University (DTU), Delhi***

**Contact:**

***Delhi Technological University, Shahbad Daulatpur, Main Bawana Road,  
Delhi - 42.***

### **Dr. Sunil Abrol**

***President, Institute for Consultancy & Productivity Research***

***Former Director General, Consultancy Development Center (CDC),***

***Ministry of Science & Technology***

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