

Faculty Profile



Er. B. Kalpana , B.Tech., M.E CSE., (Dr Hons)., (Ph.D).,
Assistant Professor- Senior Grade - CSE

HIGHLIGHTS:

- Number of Journal Publications: 53
- H-Index: 10
- Books Authored : 2 - Published books: “Mastering C and C++” (2026) and “Python Made Easy” (2025)
- Teaching / Engineering Education Experience: 23 Years
- Academic distinction: DCT Gold Medalist – 97%, Rank 1/65
- B.Tech IT – First Class Distinction, 86%, Rank 1/67
- M.E CSE – First Class Distinction, CGPA 9.0
- Honorary Doctorate in Engineering – Europe, Croatia (2025)

PROFESSIONAL LINKS:

- My website: www.bkalpana.com/about
- AICTE Faculty ID: 1-44726950796
- LinkedIn: <https://www.linkedin.com/in/bkalpanasattu>

PROFESSIONAL BACKGROUND: 23 years as an Engineering Educator

- Teaching Experience till date: 20 years
- Industrial Experience: 3 years

INTERNATIONAL EXPOSURE:

- WELA Malaysia – Lecturer, Department of Computer Science and Engineering (2007–2008).
- Completed the 5-Day International FDP on AI Innovation 2025, jointly organized by SIMATS and Strazzion LLC, North Carolina, USA (10–14 Nov 2025).
- Honorary Doctorate in Engineering – Europe, Croatia (2025), conferred at Bharathiya Vidya Bhavan, Chennai (25 January 2025).
- Guest Professor at Walailak University, Bangkok.

AREA OF SPECIALIZATION:

- Artificial Intelligence (AI)
- Machine Learning (ML)
- Dependable & Secure Computing
- Data Structures
- Intelligent Systems
- Blockchain and Cyber Security
- Computer Vision and Deep Learning
- Data Science and Big Data Analytics
- Cloud Computing and Distributed Systems
- Web Technologies and Software Engineering

COURSES CERTIFIED:

- NPTEL Certification – Foundation of Cloud IoT Edge ML, IIT Kanpur (2025).
- Capacity Building programme on CyberSecurity – IIT Madras – Malaviya Mission Teacher Training Programme – December (2025)
- AICTE ATAL FDP – High-Performance Computing (2024).
- EMC Academic Associate – Data Science & Big Data Analytics (2016).
- ICTACT FDP – Data Science & Big Data Analytics (2016).
- Python Programming Workshop, Anna University (2017).
- Python Certification, GUVI & IIT Madras (2017).
- Cisco Certified Network Associate (CCNA) (2004).
- Microsoft Innovative Educator (MIE).
- Minecraft Education Certified Trainer.

ACHIEVEMENTS AND AWARDS:

- Honorary Doctorate in Engineering, conferred at Bharathiya Vidya Bhavan, Chennai (25 January 2025).
- Best Teacher Award – Aram Seiya Virumbu Trust, Oxford University & Nithiyin Kural (14 July 2022).

- Best Entrepreneur Award – Star Golden Awards, AS Media Vision & Iswaryam Trust (3 July 2022).
- Senior Educator and Research Scholar Award – National Foundation for Entrepreneurship Development (5 September 2015).
- Certification of Appreciation – NAAM Foundation for coaching Computer Science and English to rural children (2015).
- Gold Medalist – Diploma in Computer Technology for outstanding academic performance (2000).
- Silver Medal – NPTEL Fundamentals of Algorithms and Analysis (March 2026).
- Doordarshan Interview – recognized for academic excellence.
- Chief Guest at multiple national academic conferences.

SPECIAL SESSIONS DELIVERED:

- Guest Lecture on “The New Era of Big Data” for postgraduate students at Hindusthan Institute of Technology (28 January 2014).
- Resource Person & Speaker – Saveetha Engineering College (19 November 2018).
- Chief Guest & Speaker – Jain Public School, Thirumudivakkam (2018).
- Chief Guest – Valliammal Matriculation School, Republic Day Celebration (26 January 2023).
- Chief Guest – Orchid International School, Perumbakkam, Megathlon (15 September 2024).
- Chief Guest of Honour – Natyacharyas School of Music & Dance, Convocation Ceremony (10 June 2025).
- Chief Guest of Honour – Yogi Ram Surat Kumar Educational Academy, Annual Day Celebration (15 April 2025).

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- International Seminar on Education, Leadership & Honorary Doctorate Values (2025).
- International FDP – SIMATS (2025).
- National FDP – Rajalakshmi Institute of Technology (2025).
- Malaviya Mission FDP (2025).
- AI & Machine Learning Webinar (2024).
- National Seminar on Career Development (2014).
- National Workshop on Optimization Techniques in Engineering Applications (2012).

- National Seminar on Artificial Intelligence & Expert Systems (2011).
- C Programming Training – Amphisoft Technologies (2012).
- AICTE ATAL FDP on High-Performance Computing (16–21 Dec 2024).
- 5-Day International FDP on AI-Driven Image Processing: Multimodal Fusion, Secure Analytics, and Emerging Applications (8–12 Dec 2025).
- Capacity Building Programme on Cybersecurity – Intermediate conducted by IIT Madras and IITM Pravartak under the Malaviya Mission Teacher Training Programme, Ministry of Education, Government of India (11–15 Dec 2025).

PROFESSIONAL MEMBERSHIPS:

- Orchid ID: 0009-0005-3297-7267
- Google Scholar ID: <https://scholar.google.com/citations?user=PH5sY4MAAAAJ>
- AICTE Faculty ID: 1-44726950796
- LinkedIn: <https://www.linkedin.com/in/bkalpanasattu>
- OWASP membership: 3933131 Lifetime Membership
- ResearchGate ID: <https://www.researchgate.net/profile/Kalpana-Balu>

EDITORIAL & REVIEWER ROLES

- Editor, Editorial Review Board – International Journal of Advanced Research in Management, Engineering and Technology (Since March 2016).
- Associate Editor – International Journal of Entrepreneurship and Small & Medium Enterprises (IJESMES), Kathmandu, Nepal (Since June 2015).
- Reviewer – International Journal of Advances in Engineering & Scientific Research (Since February 2016).

RESEARCH & PROJECT GUIDANCE for UG students

- Artificial Intelligence & Machine Learning: Career Guidance and Job Recommendation Systems; Crop Yield Prediction; Mental Health Risk Detection; Driver Fatigue Detection; Personal AI Voice Assistant; Vehicle Recognition; Attention Span Detection; Power Sector Regulatory Compliance using AI.
- Computer Vision & Deep Learning: OCR-Based PDF Search System; Multilingual OCR Applications; Object Detection and Multi-Object Tracking; Driver Monitoring Systems; Image Processing Applications; Feature Fusion and Cross-Camera Tracking.
- Blockchain & Cyber Security: Secure Document Verification using Blockchain; Cloud-Based Secure Health Records; Dependable and Secure Computing; Privacy-Preserving Mobile Location Services; Regulatory Compliance Systems.

- Data Science & Big Data Analytics: Hadoop & MapReduce Applications; Data Virtualization; Business Analytics; Predictive Analytics; Cloud Data Management.
- Cloud Computing & Distributed Systems: Cloud Health Record Management; Distributed Computing; Secure Cloud Storage; Paxos-Based Distributed Data Stores.
- Web Technologies & Software Engineering: AI Career Portal; Food Surplus Management System; Rural Food Delivery Platform; E-Commerce for Tribal Products; GPS-Based Academic Monitoring System; Reporting Frameworks.

BOOKS AUTHORED

- “Mastering C and C++” – Cheyran Publications, 2026, available on Flipkart and Amazon.
- “Python Made Easy” – IIP Karnataka, 2025, available on Flipkart and Amazon.

OTHER DETAILS

- Founder-CEO – ILDC Academy of Learners.
- Chief Editor – ILDC Kids Magazine.
- Motivational Speaker | Corporate Trainer | Guest Lecturer | Technical Presenter | Public Speaker (Tamil & English).
- Featured in Dina Thanthi for empowering women entrepreneurs (2026).
- Featured in Dina Thanthi (Ilangar Malar) for educational and social contributions (2025).
- Featured in Dina Thanthi Muthu Charam for guiding skills through coding (2022).
- Featured in Dina Thanthi for guiding students to choose the right path after 12th grade (2021).
- Interviewed on Doordarshan Chennai – Virundhinar Pakkam (6 August 2018).