PROF. (DR.) GANESH KUMAR DIXIT

DEAN & PROFESSOR | ENGINEERING & TECHNOLOGY
Sanskaram University, Jhajjar, Haryana, India

PROFESSIONAL SUMMARY

Prof. (Dr.) Ganesh Kumar Dixit is a Computer Science academician and researcher with 21 years of professional experience. He serves as Dean & Professor in Engineering & Technology at Sanskaram University. His academic and research interests encompass Artificial Intelligence, Artificial Neural Networks, Machine Learning and Pattern Recognition, with applications in speech-signal classification, image-pattern storage, wireless communication and smart-grid monitoring. He has also contributed to vocational IT and AI education through curriculum development, learning-resource preparation, research supervision and faculty development. [1–4]

ACADEMIC APPOINTMENT AND EXPERIENCE

- **Dean & Professor**, Engineering & Technology, Sanskaram University, Jhajjar, Haryana, India.
- **Professional experience:** 21 years.
- **Academic discipline:** Computer Science & Engineering.

RESEARCH AREAS AND SPECIALISATION

- **Artificial Intelligence and Machine Learning:** intelligent computational approaches and learning-based applications.
- **Artificial Neural Networks and Soft Computing:** neural architectures, recurrent neural networks and evolutionary optimisation.
- **Pattern Recognition and Signal Processing:** classification of voice signals and recognition of stored image patterns.
- **Image Processing and Healthcare Applications:** machine-learning approaches to image-data analysis and healthcare applications.
- **Wireless Communication and Smart Systems:** neural and deep-learning methods in wireless communication, wireless sensor networks and smart-grid monitoring.

RESEARCH AND SCHOLARLY OUTPUT

- **Research publications:** 10 research papers, including contributions to journals and international conference proceedings. [1]
- **Neural-network-based voice classification:** “Optimized Neural Network Architecture for the Classification of Voice Signals,” *International Journal of Computer Sciences and Engineering*, Vol. 6, Issue 9, pp. 502–506, 2018. The study evaluates an optimised feed-forward neural-network architecture for classifying voice signals. [2]
- **Neural networks and wireless communication:** “Comparative Analysis of Neural Networks and Deep Learning using Wireless Communication,” 2nd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), 2022. DOI: 10.1109/ICACITE53722.2022.9823530. [3]
- **Wireless sensor networks and smart grids:** “Wireless Sensor Network using Control Communication and Monitoring of Smart Grid,” ICACITE, 2022. DOI: 10.1109/ICACITE53722.2022.9823448. [4]
- **Image-pattern storage and recall:** “Implementing RNN with Non-Randomized GA for the Storage of Static Image Patterns,” *International Journal on Electrical Engineering and Informatics*, 2020. The work explores a hybrid recurrent-neural-network and genetic-algorithm approach to pattern storage and recall. [5]
- **Books:** 9 books. [1]
- **Patents:** Research and patent activity in machine-learning applications for healthcare and image-data systems. [1]

CURRICULUM DEVELOPMENT AND ACADEMIC CONTRIBUTIONS

- Contributor to vocational IT curriculum and instructional-material development at PSS Central Institute of Vocational Education (PSSCIVE), NCERT, Bhopal, including the Junior Software Developer curriculum. [6]
- Member, Study Material Development Committee, **Artificial Intelligence Associate – Grade XII**, PSSCIVE, NCERT. [7]
- Contributed to structured learning resources in IT and Artificial Intelligence for school-level and vocational education.

RESEARCH MENTORSHIP AND PROFESSIONAL ENGAGEMENT

- Research supervision and academic mentoring of Ph.D. and M.Tech. scholars. [1]
- Resource person for national workshops, Faculty Development Programmes (FDPs) and teacher-training programmes in Artificial Intelligence, Machine Learning and vocational IT education. [1]
- Individual Life Member, Association of All Computer Science Teachers (AACST). [8]

RESEARCH PROFILE

- **Sanskaram University – Faculty Profile:** https://sanskaramuniversity.ac.in/dr-ganesh
- **ResearchGate – Ganesh Kumar Dixit:** https://www.researchgate.net/profile/Ganesh-Dixit
- **ScholarList – Researcher Profile and Publications:** https://scholarlist.org/researcher/0000-0001-9894-6045
- **Academia.edu – Dr. Ganesh Kumar Dixit:** https://independent.academia.edu/DrGaneshKumarDixit
- **AACST – Individual Life Members:** https://www.aacst.org/individual-life-members.php

SELECTED PUBLICATIONS AND ACADEMIC REFERENCES

[1] **Sanskaram University – Faculty Profile**
https://sanskaramuniversity.ac.in/dr-ganesh

[2] **Dixit, G. K., Shudhalwar, D. D. & Agrawal, P. (2018). Optimized Neural Network Architecture for the Classification of Voice Signals. IJCSE, 6(9), 502–506.**
https://www.researchgate.net/publication/328962778_Optimized_Neural_Network_Architecture_for_The_Classification_of_Voice_Signals

[3] **Dixit, G. K. et al. (2022). Comparative Analysis of Neural Networks and Deep Learning using Wireless Communication. ICACITE.**
https://doi.org/10.1109/ICACITE53722.2022.9823530

[4] **Kumar, T. C. A. et al. (2022). Wireless Sensor Network using Control Communication and Monitoring of Smart Grid. ICACITE.**
https://doi.org/10.1109/ICACITE53722.2022.9823448

[5] **Implementing RNN with Non-Randomized GA for the Storage of Static Image Patterns (2020).**
https://independent.academia.edu/DrGaneshKumarDixit

[6] **PSSCIVE–NCERT – Junior Software Developer Curriculum**
https://www.dvet.gov.in/wp-content/uploads/Desk/junior-software-developer-english-1.pdf

[7] **PSSCIVE–NCERT – Artificial Intelligence Associate, Grade XII**
https://psscive.ac.in/storage/uploads/textbooks/pdf/english/artificial-intelligence-associate-english-class-%2012.pdf

[8] **AACST – Individual Life Members Directory**
https://www.aacst.org/individual-life-members.php

Contact details and degree-wise qualifications may be added after confirmation by the faculty member.