

**Name** : Dr.K.Kavitha

**Designation** : Associate Professor

**Department** : Computer Applications

**Qualification** : M.C.A., M. Phil., Ph. D., TN-SET.,

**Experience** : Teaching: 13 Years Research: 9 Years

**Area of Specialization(s)**: Cloud Computing, Internet of Things, Artificial Intelligence

**Email (Official ID):** [kavitha.k@drngpasc.ac.in](mailto:kavitha.k@drngpasc.ac.in)



#### Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Computer Science	Hindusthan College of Arts and Science, Coimbatore	2021
M.Phil.	Computer Science	Periyar University, Salem	2005
M.C.A	Computer Applications	Kongu Engineering College, Perundurai	2004
B.C.A	Computer Applications	SrimathiIndra Gandhi College,Trichy	2001

#### Research Publications (Indexed)

K.Kavitha, “SURVIVAL STUDY ON DATA STORAGE AND TRANSACTION SECURITY USING AUTHENTICATION TECHNIQUES”, International Journal of Computer Science and Engineering, Vol.06 , Issue.08 , pp.34-39, Oct-2018, ISSN:2229-5631, (Indexed in UGC ).

K.Kavitha, “ SURVEY ON CLOUD SECURITY MECHANISMS FOR DATASTORAGE AND DATA TRANSACTION”, International Journal of Scientific Research in Computer Science Applications and Management Studies, Volume 7, Issue 5,Sep-2018, Vol.06,pp.24-32 , Oct- 2018,ISSN 2319 – 1953, ( Indexed in UGC ).

K.Kavitha, “SEMANTICALLY SECURED NON-DETERMINISTIC BLUM– GOLDWASSER TIME-BASED ONE-TIME PASSWORD CRYPTOGRAPHY FOR CLOUD DATA STORAGE SECURITY”, International Journal on Future Revolution in Computer Science & Communication Engineering, Volume 5, Issue: 8, pp. 83 – 93, Aug -2019, ISSN: 2454-4248 ( Indexed in UGC).

K.Kavitha, “CERTIFICATELESS BILINEAR QUANTUM MUTUAL EXCLUSIVE

SIGNCRYPTION FOR DATA SECURITY IN CLOUD”, International Journal of Innovative Technology and Exploring Engineering, Volume-9 Issue-2, pp.3870–3878, Dec 2019, ISSN: 2278-3075 ( Indexed in UGC).

K.Kavitha, “RUZICKA SIMILARITY BASED TWO FACTOR USER AUTHENTICATIONS FOR SECURITY ENHANCEMENT IN CLOUD DATA SERVICES”, Journal of Interdisciplinary Cycle Research (JICR), ISSN: 0022-1945, Volume XII, Issue VI, Pages 1315 - 1329, Jun 2020, (Indexed in UGC).

K.Kavitha, “EPHEMERAL SCHNORR SIGNCRYPTION FOR SECURE DATA TRANSACTION IN CLOUD”, International Journal of Advanced Trends in Computer Science and Engineering (IJATCSE), E-ISSN: 2278 – 3091, Volume 9, Issue 4, Pages 6812– 6820, Aug 2020, (Indexed in SCOPUS).

K.Kavitha, “A COMPARITIVE ANALYSIS OF CLOUD BASED WITH TRADITIONAL HOSTED SYSTEM”, International Research Journal of Modernization in Engineering Technology and Science (IRJMETs), E-ISSN: 2582-5280, Volume 5, Issue 5, May 2023, Pages 1395 – 1398, (Peer Reviewed, Open Access Fully Refereed International Journal).

K.Kavitha, “ANT WITH ARTIFICIAL BEE COLONY TECHNIQUES IN VEHICULAR AD-HOC NETWORKS”, International Journal of Data Informatics and Intelligent computing (IJDIIc), ISSN: 2583-6250, Volume. 2, No. 3, pp. 21~28, September 2023, DOI: 10.59461/ijdiic.v2i3.69 (Open Access)

K.Kavitha, “ENERGY EFFICIENT COMPUTING STRATEGIES FOR GREEN CLOUD”, Journal of Propulsion Technology, ISSN: 1001-4055, Volume 44, No 6, Pages 6009 – 6016, Dec 2023, (Indexed in SCOPUS).

K.Kavitha, “ENHANCING CLOUD-BASED IOT SECURITY WITH LIGHTWEIGHT CRYPTOGRAPHIC TECHNIQUES”, Journal of Cyber Security in Computer System, e-ISSN: 2583-4703, Vol. 3, Issue 3 (September–December, 2024) pp:(38-49), [URL:https://matjournals.net/engineering/index.php/JCSCS/index](https://matjournals.net/engineering/index.php/JCSCS/index)

K.Kavitha, “Crop Prediction using Supervised Learning”, International Journal of Computer Communication and Informatics, Vol. 6 Issue. 2, pp. 1-12, Nov 2024, DOI: 10.34256/ijcci2421.

K.Kavitha, “Artificial Intelligence and Agricultural Biotechnology for Sustainable Farming Practices”, International Journal of Civil, Environmental and Agricultural Engineering, Vol. 6, Issue 2, pp 13-26, Dec 2024, DOI: 10.34256/ijcci2422

K.Kavitha, "Fault Detection System Using Machine Learning in IoT Based Automobile Industries,"

2024 2nd International Conference on Computing and Data Analytics (ICCD A), Shinas, Oman, 2024, pp. 1-6, doi: 10.1109/ICCD A64887.2024.10867303.<https://ieeexplore.ieee.org/document/10867303>

K.Kavitha, “AI-ENHANCED ACCESS CONTROL AND AUTHENTICATION”, Journal of Cyber Security in Computer System, e-ISSN: 2583-4703, Vol. 3, Issue 3 (September – December, 2024) pp: (50-57), URL: <https://matjournals.net/engineering/index.php/JCSCS/article/view/999>

K.Kavitha, “Online Exam Portal Using CNN”, International Journal of Research Publication and Reviews, ISSN 2582-7421, Vol 6, Issue 4, pp 916-925 April 2025, DOI:<https://ijrpr.com/uploads/V6ISSUE4/IJRPR41447.pdf>.

K.Kavitha, “CNN-Based Crop Disease Detection and Soil Recommendation”, International Journal of Research Publication and Reviews, ISSN 2582-7421, Vol 6, Issue 4, pp 1795-1800 April 2025, DOI:<https://ijrpr.com/uploads/V6ISSUE4/IJRPR41590.pdf>.

#### **Publication of Book Chapters**

Kavitha.K “CLOUD DATA STORAGE SECURITY”, Chapter 7( Pages: 44 – 52) of the book “Modern Computer Science and Applications”, First Edition , ISBN Number: 978-93-93622-07-5, published by Innovation Online Training Academy, July 15<sup>th</sup> 2022.

K. Kavitha, “CLOUD-BASED DATA ANALYTICS FOR HEALTHCARE 5.0”, Chapter 4 (Pages:44 -56), Pioneering Smart Healthcare 5.0 with IoT, Federated Learning, and Cloud Security, DOI: 10.4018/979-8-3693-2639-8.ch004, ISBN13: 9798369326398|EISBN13: 9798369326404, IGI Global Publishing, February 2024 (SCOPUS Indexed).

K. Kavitha, “REVOLUTIONIZING UAV TECHNOLOGY: THE ROLE OF REINFORCEMENT FEDERATED LEARNING IN ARTIFICIAL INTELLIGENCE”, Chapter 26, AI AND ITS APPLICATIONS, September 2024, ISBN Number: 978-93-93622-75-4, published by Innovation Online Training Academy.

#### **Presentations in Conferences & Seminars**

SURVIVAL STUDY ON DATA STORAGE AND TRANSACTION SECURITY USING AUTHENTICATION TECHNIQUES, International Conference on Research Trends in Computing Technologies, Dr. N.G.P. Arts and Science College, Coimbatore, 9-Aug -18 and 10-Aug-18.

RELATIVE STUDY OF AUTHENTICATION TECHNIQUES ON CLOUD DATA STORAGE AND TRANSACTION SECURITY, National Conference on Emerging Trends in Computer Science and Technology, SNMV College of Arts and Science, Coimbatore, 1-Feb -19.

TWO FACTOR USER AUTHENTICATIONS FOR SECURE CLOUD DATA SERVICES, National Conference on Recent Trends and Advances in the Field of Information Technology, Karpagam Academy of Higher Education, 2-Sep-18.

INTERNATIONAL CONFERENCE ON ADVANCES IN SENSORS, ENERGY AND HYBRID VEHICLES, ICT Academy, October 14 – 18, 2020.

COMPUTING STRATEGIES FOR GREEN CLOUD , National Conference On Cybersecurity and Digital Forensics For Society, PSGR Krishnammal College for Women, 19.10.2022 and 20.10.2022.

DYNAMIC LOAD BALANCING FOR LOW ENERGY CONSUMPTION AND HIGH EFFICIENCY IN GREEN CLOUD COMPUTING , National Conference on Advanced computing Sciences , Dr.N.G.P Arts and Science College, 16.03.2023.

ARTIFICIAL INTELLIGENCE IN SECURITY, International Conference on Computational Intelligence and Biological Sciences, ISBN : 978-93-5996-261-0, Sri Ramakrishna College of Arts and Science for Women, on October 5<sup>th</sup> 2023.

“A STUDY ON ENERGY EFFICIENT GREEN CLOUD COMPUTING STRATEGIES”, International Conference on Computational Intelligence And Communication Technologies, Faculty of Computer Science, Dr.N.G.P. Arts and Science College in association with Analytics Society of India & ICT .Academy on January 4, 2024.

ICSSR Sponsored National Seminar on “IOT CYBER SECURITY: CHALLENGES AND SOLUTIONS FOR SOCIAL AND REAL-LIFE APPLICATIONS”, Department of Computer Science with Cognitive Systems, Dr.N.G.P. Arts and Science College on January 5<sup>th</sup> 2024.

“IoT APPLICATIONS IN RADIATION ONCOLOGY”, Second International Conference on Recent Trends in Computer Science and Data Analytics 2024, School of Computing Science, Department of Computer Science with Data Analytics, KPR College of Arts Science and Research on February 2<sup>nd</sup> 2024.

### **Funded Projects**

Dr.R.Senthil Kumar & Dr.K.Kavitha, “AICTE ATAL sponsored (Rs.3,50,000) FACULTY DEVELOPMENT PROGRAMME (FDP) on DESIGN OF INTERNET OF THINGS (IoT) SOLUTIONS FOR SUSTAINABLE ENVIRONMENT”, 02nd to 07th September, 2024

### **Participation in Workshop, Conference, Seminar & FDP**

HANDS ON TRAINING ON LATEX DOCUMENTATION TOOL, Sri Ramakrishna Engineering College ,Coimbatore, 7-Sep-18 and 8-Sep-18.

AWARENESS WORKSHOP – NIRF INDIA RANKINGS – 2021 FOR HIGHER EDUCATIONAL INSTITUTIONS, Institute of Academic Excellence, Hyderabad & Collegiate Education & Technical Education Department, Government of Telungana, January 18 – 19,2021.

DHR-ICMR SPONSORED ONE DAY NATIONAL LEVEL WORKSHOP ON ADVANCED ARTIFICIAL INTELLIGENCE(AI) METHODS IN BREAST CANCER DIAGNOSIS AND CLINICAL RESEARCH, Department of Computer Science with Cognitive System & Clinical Lab Technology, Dr.N.G.P. Arts and Science College on November 26<sup>th</sup> 2022.

“DIGITAL TRANSFORMATION DATA FABRIC& INDUSTRIAL INSIGHT 2023”, Department of Computer Science,PSG College of Arts and Science on April 1<sup>st</sup> 2023.

“PROFESSIONAL DEVELOPMENT WORKSHOP ON DIGITAL CREATIVITY SKILLS”, Adobe Express & AICTE on 29<sup>th</sup> May 2023.

Nine Days National Level Workshop on “DEVOPS”, organized by e Faculty of Science and Humanities, Department of Computer Science & Applications (B.Sc CS), SRM Institute of Science and Technology, Ramapuram, Chennai from 16 June 2023 to 24 June 2023.

“IEEE TRAINING ON IEEE XPLORE”, Dr.N.G.P. Arts and Science College & EBSCO Information Services India Pvt. Ltd on 17<sup>th</sup> October 2023.

### **Participation in Faculty Development Programme & Seminars**

QUALITY INITIATIVES IN HIGHER EDUCATION, Dr. N.G.P. Arts and Science College, Coimbatore, 3-Dec-18 to 9-Dec-18.

QUALITY INITIATIVES IN HIGHER EDUCATION, Dr. N.G.P. Arts and Science College, Coimbatore, Sri Ramakrishna College of Arts and Science, Coimbatore, Gobi Arts & Science College, Gobichettipalayam & Vellalar College for Women, Erode, Online, April 13 - 20, 2020.

EMOTIONAL INTELLIGENCE,KG COLLEGE OF ARTS & SCIENCE,COIMBATORE on 28, 30 April & 2 May 2020.

ADVANCED CONCEPTS IN IoT,Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Online, July 17, 2020.

Online FDP on “RESEARCH METHODOLOGY AND PEDAGOGY FOR TERTIARY EDUCATION”, Dr.N.G.P. Arts and Science, 15-Jun-21 to 21-Jun-21.

“FUNDAMENTALS OF RPA”, conducted by ICT Academy on 04 Oct 2021 to 08 Oct 2021.

“FIVE DAY IQAC FDP SERIES 2022” organized by Internal Quality Assurance Cell, Sankara College of Science & Commerce from 24<sup>th</sup> to 29<sup>th</sup> January 2022.

One Week Online International FDP on “NEXT GENERATION COMPUTING : KEY TRENDS, CHALLENGES AND OPPORTUNITIES” organized by the Department of Computer Science & Applications (MCA), SRM Institute of Science & Technology, Ramapuram Campus from 18-04-2022 to 23-04-2022.

DHR-ICMR Sponsored One Day National Level Workshop on “ADVANCED ARTIFICIAL INTELLIGENCE (AI) METHODS IN BREAST CANCER DIAGNOSIS AND CLINICAL RESEARCH”, Organized by Department of Computer Science with Cognitive Systems & Clinical Laboratory Technology, Dr.N.G.P. Arts and Science College on November 26<sup>th</sup> 2022.

International virtual FDP on “RESEARCH ADVANCEMENTS IN INTELLIGENT COMPUTING TECHNOLOGIES”, organized by Department of Computer Science and Engineering, Sri Krishna College of Engineering and Technology from 19.12.2022 to 23.12.2022.

6-Day International Virtual Faculty Development Programme on “RESEARCH TRENDS AND RESEARCH METHODOLOGIES, TOOLS AND TECHNIQUES” organized by Department of Information Technology, KG College of Arts and Science, from 10.07.2023 to 15.07.2023.

Five Days Faculty Development Programme on “Empowering Education for Innovation – A NEP Perspective”, organized by Dr.N.G.P. Arts and Science College from 30<sup>th</sup> June 2023 to 4<sup>th</sup> July 2023.

A Two Day NAAC Collaborated National Virtual Seminar on “HOLISTIC AND MULTIDISCIPLINARY APPROACH TOWARDS NATIONAL HIGHER EDUCATION QUALITY FRAMEWORK”, organized by CAUVERY COLLEGE FOR WOMEN(AUTONOMOUS), Trichy on 05.07.2023 & 06.07.2023.

One Week Faculty Development Programme on “UPSKILL YOUR RESOURCES”, under UGC Autonomy grant, organized by Ayya Nadar Janaki Ammal College, Sivakasi from 07.07.2023 to 13.07.2023.

One Week National Level Faculty Development Programme on “ CLOUD INFRASTRUCTURE (AWS), organized by KG College of Arts and Science & Brain O Vision, from 21<sup>st</sup> to 25<sup>th</sup> August.

Two Days Faculty Development Programme on “IoT”, organized by Center for IoT & Enthu Techonology Solutions India Pvt Ltd on 15.11.2023 & 16.11.2023.

One Day National Level Seminar on “CYBER SPACE – CHALLENGES AND ITS APPLICATIONS”, organized by School of Computer Science and Engineering and Information Science, Presidency University, Bengaluru on 15th December 2023.

5-Day Virtual Faculty Development Programme on "EMERGING RESEARCH TRENDS IN COMPUTER SCIENCE" organized by the Department of Computer Science, KG College of Arts and Science from 08/01/2024 to 12/01/2024.

Presented the paper entitled, "The Role of Technology in Disseminating Traditional Indigenous Knowledge Systems (TIKS) Based Education" - ICSSR, New Delhi sponsored National Seminar on "Integration of Traditional Indian Knowledge System into Modern Higher Education: NEP Perspective (ICSSRIKS2024)"

ISBN:978-81-971000-5-5

Presented the paper entitled, “Crop Prediction using Supervised Learning”, DBT-CTEP sponsored One day National Seminar on Artificial Intelligence Innovations for Advanced Biological Science and Research, Dr.N.G.P. Arts and Science College,Dec 27th 2024

Presented the paper entitled,, “Fault Detection System Using Machine Learning in IoT Based Automobile Industries.” 2024 2nd International Conference on Computing and Data Analytics (ICCDA), IEEE, 2024, pp. 1–6. Shinas, Oman DOI.org (Crossref), <https://doi.org/10.1109/ICCDA64887.2024.10867303>.

Ptesented the paper entitled, "Carbon Emission Monitoring in Home Sensor Networks using Green-IoT based Event Detection", International Conference on Computational Intelligence and Communication Technologies", Dr.N.G.P. Arts and Science College, Jan 3rd 2025.

Attended the Training Programme, "EBSCO Training on EBSCOhost - General", conducted by EBSCO Information Services at Dr. N.G.P. Arts and Science College on 22.08.2025.

Presented the paper entitled, "Landslide Monitoring Using Bio-Inspired Robots", in the International Conference on "Recent Trends in Multi-Disciplinary Research and Innovation" at A.V.P. College of Arts and Science, Tirupur on 19.9.2025.

Attended six days AICTE Training And Learning (ATAL) Academy Faculty Development Program on "Optimizing Next-Gen Computing for Smart System Development" at National Institute of Technology Warangal from 13/10/2025 to 18/10/2025.

### **Participation in Webinars**

C and CPP,JSPM's Jaywantra Sawant Polytechnic in association with Spoken Tutorial IIT Bombay, Online, 25-Apr – 02 May 2020.

PHP & MySQL,Center for Virtual Learning,Dr.N.G.P. Arts and Science College, Coimbatore, in association with SPOKEN TUTORIAL, IIT BOMBAYon May 04 - 10, 2020.

International Webinar on 6G TECHNOLOGIES,Hindusthan College Of Arts And Science, Coimbatore, Online, July 16 2020.

DST-PURSE sponsored Webminar series on ADVANCED COMPUTING , Bharathiar University, Coimbatore on November 02, 2020.

Webinar on HOW TO WRITE A GRANT PROPOSAL conducted by Dr Jacob Wickham, Dr Herbert Kim Lyerly and Dr Ravi Mehrotra, organized by Editage, OHSL & CHIP on the 14th of August 2023.

### **Certificate Courses Completed**

DATABASE MANAGEMENT SYSTEM, NPTEL Online Certification, Feb – Apr 2019.

INTRODUCTION TO C PROGRAMMING, NPTEL Online Certification, Feb – Apr2020.

DIGITAL TEACHING TECHNIQUES, ICT Academy from 10 Aug 2020 to 15 Aug 2020.

INTRODUCTION TO DATA SCIENCE IN PYTHON, University of Michigan, Coursera certification on September 23 2020.

AI FOR EVERYONE, Deep Learning.AI, Coursera certification on June 7 2021.

MySQL Basics, Great Learning Academy, Certification on September 2022.



Data Structures in C, Great Learning Academy, Certification on February 2023.

Basic CSharp Programming, Infosys Spring Board, Certification on August 14<sup>th</sup> 2023.

PHP for Web Development, Infosys Spring Board, Certification on January 3<sup>rd</sup> 2024.

Data Base Management Systems, Infosys Spring Board, 55Hrs, May 2025.

Fundamentals of Data Networking, Infosys Spring Board, 35 Hrs, May 2025.

Python Fundamentals, Infosys Spring Board, 11 Hrs, May 2025.

#### **Patents published**

IoT Based Vessel Monitoring - Application No. 202341042373 A -Publication Date : 07/07/2023

#### **Membership in Professional Bodies**

International Association of Engineers (IAENG)

Computer Science Teachers Association (CSTA)

Institute for Engineering Research and Publication(IERP)

Internet Society (IS)

#### **Resource Person**

Acted as Doctorial Member at Hindusthan College of Arts and Science, Coimbatore on 06.08.2025

#### **Reviewer in Journals & International Conferences**

Measurement: Sensors Journal ( Indexed in Scopus, DOAJ & Ei Compendex)

<https://www.editorialmanager.com/measen/default2.aspx>

International Conference on Artificial Intelligence, Communication, IoT, Data Engineering and Security (IACIDS 2023), organized by the Department of Data Science, CHRIST (Deemed to be University), Pune Lavasa Campus – The Hub of Analytics, during November 23<sup>rd</sup> to 25<sup>th</sup> 2023.

2024 Fourth IEEE Sponsored International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2024), organized by Department of Electrical & Electronics Engineering, Shri Shankaracharya Technical Campus, Bhilai,

Chhattisgarh, India during 11<sup>th</sup> and 12<sup>th</sup> January 2024.

Reviewer - 2024 Sixth IEEE International Conference on Electrical, Computer and Communication Technologies.

Editorial Board member -Journal of Big data Analytics and Business Intelligence - MAT Journals

Editorial Board member -Journal of Security in Computer Networks and Distributed Systems - MAT Journals

Reviewer in Journal of Cryptography and Network Security, Design and Codes - MAT Journals.

#### **Additional Institutional Responsibilities Held**

NIRF Joint Coordinator

India Today Ranking Committee Member

Week Ranking Committee Member

Open Magazine Ranking Committee Member

NCVRT Course Instructor

PTA Member