

FACULTY PROFILE

Name of the Staff : D.VIJAYAKUMAR
Designation : Assistant Professor (Sr.Grade)
Date of joining in the college : 04-06-2010
E-mail Id : dvk@nec.edu.in
Mobile Number : 9994357984



Educational Qualification

| Educational Qualification | Branch | Name of the Institution/University | Yr. of Passing | Class/ Division |
|---------------------------|------------------------------------|------------------------------------|----------------|-----------------|
| B.E | CSE | Jayamatha Engineering College | 1999 | First |
| M.S (By Research) | Information and Communication Engg | Anna University Chennai | 2009 | First |
| Ph.D | Information and Communication Engg | Anna University Chennai | Pursuing | |

Professional Experience (In chronological order)

| Designation | Institution/Organization | Period | Nature of Duties |
|--------------------------------|--|-------------------------|--|
| Assistant Professor (Sr.Grade) | National Engg College | 13.07.2015 – Till Date | Teaching, Administrative Work, Research, Software Development Group, Assistant Controller of Examinations |
| Assistant Professor | National Engg College | 01.11.2011 – 12.07.2015 | Teaching, Administrative Work, Research, Software Development Group |
| Lecturer | National Engg College | 04.06.2010 – 31.10.2010 | Teaching, Project Guidance |
| Lecturer | Arulmigu kalasalingam College of Engineering | 15.06.2001 – 03.06.2010 | Teaching, Trainee for Certification Courses, Administrative Work, Member in Software Technology Group TIFAC – Core in Network Engg |
| Software Trainee | Software Solution Integrated Ltd | 07.06.1999 – 13.06.2001 | Project Trainee and development |

No. of years of Experience

| | | | |
|----------------------|----------|-----------------------------|---------|
| i. NEC | : 14 Yrs | ii. Other Colleges | : 9 Yrs |
| iii. Industry | : 2 Yrs | iv. Other than above | : - |

List of International Journals

| S.No. | Name of the Authors | Title of Paper | Name of Journal | Page No & Volume | Year of publication |
|-------|--|---|--|--|---------------------|
| 1 | D. Vijayakumar K. Vivekrabinson S. Rajesh Kumar | Medical data sharing using blockchain with secure patient/doctor interaction | International Journal of System of Systems Engineering | Vol. 14, No. 2 | 2024 |
| 2 | D. Vijayakumar K. Vivekrabinson S. Rajesh Kumar | Blockchain Enabled Real Estate Property Transactions using NFT: An Approach | IEEE Explorer | - | 2024 |
| 3 | Vijayakumar.D R. Sowmini @ Mahalakshmi | An Optimal Energy Preserved In Dynamic Load Balancing Using Monarchy Butterfly Optimization | Journal of Pharmaceutical Negative Results | 2505-2513, Vol:14 | 2023 |
| 4 | Vijayakumar.D Aashikha.M, Abisheka Puvan.N, Gowsalya.B, | 'An Iot Based Home Automation For Physically Challenged And Elderly People' | SSRG International Journal of Computer Science and Engineering (SSRG-IJCSE) (SCOPUS) | 07-10 Volume 8 Issue 3 | March 2021 |
| 5 | D. Vijayakumar M.Prakashini | 'Sentimental Classification of News Headlines using Recurrent Neural Network' | International Journal of Innovative Technology and Exploring Engineering (IJITEE) (SCOPUS) | 207-210 Volume-9 Issue-6 | April 2020 |
| 6 | Vijayakumar D Gangatharan S, Lakshmi N, Vishnupriya B, | Employee Interaction Analysis In Cooperate Environment | SSRG International Journal of Computer Science and Engineering (SSRG-IJCSE) (SCOPUS) | 19-22 Volume 7 Issue 4 | April 2020 |
| 7 | Vijayakumar.D Aashikha.M, Abisheka Puvan.N, Gowsalya.B, | Intelligent street light for smart city | SSRG International Journal of Computer Science and Engineering (SSRG-IJCSE) (SCOPUS) | 04-06 Volume 7 Issue 4 | April 2020 |
| 8 | D. Vijayakumar, VS.SelvaSiva Santhiya | Protected Replica Placement Scheme to Improve Data Availability in Cloud Data Center | International Journal of Science, Engineering and Technology Research (IJSETR) | 349-355, Vol.6, issue 3 | March 2017 |
| 9 | D. Vijayakumar, Dr.K.G.Srinivasagan, R.Sabarimuthukumar | Modeling Fuzzy based Replication strategy to improve data availability in Cloud Data Center | Pak. Journal of Biotechnology | 225-230, vol.13 | 2016 |
| 10 | D. Vijayakumar, V.Bharath, R.Sabarimuthukumar | An efficient load balancing algorithm For cloud environment | International Journal of Advance Research In Science And Engineering | Vol. No.4, Special Issue (02), | March 2015 |
| 11 | D. Vijayakumar, Dr.K.G.Srinivasagan, R. Vijayakumar | An efficient role-based access control On encrypted data in cloud | International Journal of Advance Research In Science And Engineering | Vol. No.4, Special Issue (02), | March 2015 |
| 12 | D. Vijayakumar, Dr.K.G.Srinivasagan, | An Improved Dynamic Data Replica Selection and Placement in Hybrid Cloud | International Journal of Innovative Research in Science, Engineering and Technology | Vol. No. 3/Special Issue.3/ 2187-2192 | March 2014 |

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|----|----------------------------------|--|--|----------------------|---------------|
| 13 | D. Vijayakumar, R.Maheshwari | Automatic Tag Cloud realization of web search results using Incremental clustering By Directions Algorithm | International Journal of Computer Applications | ICON3C/ 1 12 – 17 | May , 2012 |
| 14 | D. Vijayakumar, R.Murugeswari | Collaborative user building concept based profile | International Journal of Computer Applications | ICON3C/3 07 - 11 | May , 2012 |

Industrial Know How Training:

Industry: SAVIC Technologies pvt. Ltd,
NSIC Software Tech Park,
Guindy Industrial Estate, Chennai.

Training Topic: SAP for IT Services

Duration: 16.07.2018 to 20.07.2018

List of International Conference

| S.No | Name of the Faculty | Title of Paper | Name of the Conference | Year of publication |
|------|---|--|---|--|
| 1. | D. Vijayakumar K. Vivekrabinson S. Rajesh Kumar | Blockchain Enabled Real Estate Property Transactions using NFT: An Approach | IEEE International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering | 2023 |
| 2. | D. Vijayakumar, R. Sowmini @ Mahalakshmi | Optimal energy preserved dynamic load balancing in virtual machine using monarchy butterfly optimization | Workshop on Computing Innovations and Applications in AI and IoT (CI2AI) | April 2023 |
| 3. | D. Vijayakumar G.selva gomathi Ha.shantha vidhuthra | Smart Student Information Assistance | International conference on Emerging Trends in computing, Communication and Automation Technology, Srividya college of Engineering & Technology | 2019 |
| 4. | D. Vijayakumar, M. Kanthimathi | An Enhanced Approach of genetic and ANT colony based Load balancing in cloud Environment | IEEE International Conference on Soft Computing and Network Security, SNS College of Technology, Coimbatore. | 14-16, Feb, 2018 |
| 5. | D. Vijayakumar, VS.SelvaSiva Santhiya | Protected Replica Placement Scheme To Improve Data Availability In Cloud Data Centre | IEEE Sponsored 4 th International Conference on Advanced Computing & Communication Systems (ICACCS2017), Sri Eshwar College of Engineering, Coimbatore | 6 th and 7 th January 2017 |
| 6. | D. Vijayakumar, Dr.K.G.Srinivasagan, N.K.Nivedha | Modeling fuzzy Based Replication Strategy to Improve data Availabiity in Cloud Datacenter | IEEE international Conference on Computing Technologies And intelligent Data Engineering (ICCTIDE16) | 07-09, Jan 2016 |
| 7. | D. Vijayakumar, Dr.K.G.Srinivasagan | FIR3: A Fuzzy Inference Based Reliable Replica Replacement Strategy for Cloud Data Centre | IEEE Sponsored International conference on Computing and Network Communications (CoCoNet15), IIITM, Trivandrum | 16-19, Dec 2015 |
| 8. | D. Vijayakumar, Dr.K.G.Srinivasagan, A.Rajalakshmi | An improved dynamic data replica selection and placement in hybrid cloud | ICRTIT 2014 (Fourth International Conference on Recent trends in Information Technology), IEEE Computer Society Press, MIT Chennai. | 10-12, April 2014 |

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| 9. | D. Vijayakumar, Dr.K.G.Srinivasagan, V.Brindha | An Efficient Dynamic Indexing and Metadata Model for Storage in Cloud Environment | 2014 IEEE International Conference on Innovations in Engineering and Technology (ICIET'14) | 21, 22 nd March 2014 |
| 10. | D. Vijayakumar, S. Petchimuthu | Inferencing user ontology for semantic web search | International Conference on Emerging Trends in Computer and Communication Technology | 16 – 17 th Feb 2012 |
| 11. | D. Vijayakumar, R. Murugeswari | Enhancing the concept based user profile from search engine using collaborative filtering Algorithm | International Conference on Emerging Trends in Computer and Communication Technology | 16 – 17 th Feb 2012 |
| 12. | D. Vijayakumar, R. Maheswari | Integrating Query expansion and clustering of web search results using CBD algorithm | International Conference on Emerging Trends in Computer and Communication Technology | 16 – 17 th Feb 2012 |
| 13. | D. Vijayakumar, | Automatic Tag Cloud realization of web search results using Incremental clustering By Directions Algorithm | International Conference on Recent Trends in Computational Methods, Communication and Controls | 4 th April 2012 |
| 14. | D. Vijayakumar, | Collaborative user building concept based profile | International Conference on Recent Trends in Computational Methods, Communication and Controls | 4 th April 2012 |
| 15. | D. Vijayakumar, | An Optimized Data Cleaning framework for Heterogeneous Web Data Sources | International Conference on (SDIP 2011) | March 2011 |
| 16. | D. Vijayakumar, | Video Denoising in Wavelet Domain using SURE-LET | International Conference on Intelligent Science and Technology (IIST'11) | 2011 |

Short term Courses/Conference/Workshops/Seminars Organized:

| S.No | Title | Duration of the workshop | Number of Participants | Venue |
|------|---|--------------------------|------------------------|-----------------------|
| 1 | <i>Value Added Course on AWS Web Services for Beginners</i> | March 2024 | 30 | National Engg College |
| 2 | Workshop on “Exploring Database Management Systems” | 11.04.17 to 13.04.17 | 30 | National Engg College |
| 3 | One day Main workshop on C and CPP Under the National Mission of Education through ICT, MHRD, New Delhi | Feb 29, 2020 | 20 | Remote Centre: NEC |

List of National Conferences

| S.No | Name of the Faculty | Title of Paper | Name of the Conference | Year of publication |
|------|---|--|--|---------------------|
| 1. | D. Vijayakumar, Dr. K. G. Srinivasagan, R.Rajapriya | A dynamic Data replication in Cloud to increase availability of popular data | 2nd national Conference on Information and Communication Technologies, Kongu Engineering College | 22, Feb 2013 |
| 2. | D. Vijayakumar, Dr.K.G.Srinivasagan, | Management of data using dynamic data replication in Cloud | National conference on Information and Network Management, Thiagarajar College of Engineering, Madurai | 4 – 5, April 2013 |
| 3. | D. Vijayakumar, Dr.K.G.Srinivasagan, V.Brindha | An effective resource discovery information retrieval system in cloud | Vision13, Govt. College of Engineering, Tirunelveli | 18, Apr 2013 |
| 4. | D. Vijayakumar, R.Maheswari | Automatic Tag Cloud Realization using Incremental Clustering by Subjects algorithm | DRDO Sponsored National Conference on “Computer Vision, Dr. Sivanthi Adidanar College of Engineering | 6- 7, Jan 2012 |

Short term Courses/Seminar/Conference/Workshop Attended

| S.No | Institution | Topic | Course Detail | Date |
|------|---|---|--|--|
| 1. | Vidhya Vihar institute of technology, Puren, Bihar | Transforming Education with AI: Strategies for Innovation and Engagement (online) | AI tools for Learning and Assessment | 16 Sep 24 to 21 Sep 24 |
| 2. | Gandhi Institute of Technology and Management (GITAM School of Technology), Bangaluru | ATAL FDP on “Generative AI and Metaverse: Tools and Technologies for Improving Teaching Learning Process in Higher Education” | Generative AI and Metaverse | 04 Dec 23 to 09 Dec 2023 |
| 3. | ICT Academy | Technical FDP on Cloud Practitioner (AWS) | Hands on Session – AWS Cloud | 27 Mar 2023 to 31 Mar 2023 |
| 4. | NIT Sikkim | ATAL Sponsored FDP on “Cloud Forensics: Techniques, Challenges and Research Directions” | Virtual online Training | 18 Oct - 21 to 22 Oct 21 |
| 5. | ICT Academy | Introduction to Angular JS | Virtual Hands on Training | 24 th to 28 th May 2021 |
| 6. | INFLIBNET Centre | ATAL Sponsored FDP on “Cloud Technology” | Virtual Training on Cloud Technology | 09 th to 13 th Nov 2020 |
| 7. | Uipath Academic Alliance | Virtual Industrial Training on “RPA design and Development” | Hands on Robotics Process Automation Industrial Training | 8 th to 20 th April 2020 |
| 8. | National Power Training Institute, Alappuzha | ATAL Sponsored FDP on “Internet of Things” | Hands on Training on IOT | 16 th to 20 th Dec 2019 |
| 9. | Indian Institute of Information Technology Design and Manufacturing | Two days Workshop on “Technical Writing and Publishing with Advanced Computer Tools: Hands-on Training” | Explored LaTeX writing Tool, IIITD&M, Kanchepurem | 08,09, Sep,2018 |
| 10. | B.M.S. College of Engineering, Bangaluru | GIAN Course on “Towards Safe Cities: A Mobile and social Networking Approach” | MHRD Sponsored GIAN Course | 01.06.18 to 06.06.18 |

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| 11. | IIT Madras Research Park | Seminar on Incubation Opportunities at IITM RP | IITM RP | 08.11.17 |
| 12. | National Engineering College | Data Science and Big Data Analytics | ICTACT – EMC CORPORATION | 13.06.17 – 17.06.17 |
| 13. | TCS Chennai | Two Days Industrial FDP on Cloud Computing | TCSION Academy | 23.05.2016 to 24.05.2016 |
| 14. | National Engineering College | Workshop On Modern Computing Technologies For Affective Brain Computer Interface | DBT Sponsored Workshop | 08/01/2016 to 09/01/2016 |
| 15. | Kongu Engineering College | Big data and cloud computing for Bioinformatics Applications | DBT Sponsored national seminar | 09/01/2015 to 10/01/2015. |
| 16. | Mepco schlenk Engineering College | Cloud Infrastructure and Services | ICTACT – EMC CORPORATION | 19-05-2014 to 23-05-2014. |
| 17. | National Engg College | Research opportunities in Machine Learning and Speech synthesis | CIIL Sponsored Seminar | 02- 05 th Jan, 2014. |
| 18. | Hindustan college of Engg & Technology, Coimbatore | BIG Data – A New world of Opportunity | Two days Workshop | 22.08.2013 to 23.08.2013 |
| 19. | National Engg College | “Research opportunities in Machine Learning and Natural Language processing | CIIL Sponsored National Level seminar | 03.12.12 to 06.12.12 |
| 20. | National Engg College | “Tivoli Directory Server” | IBM Workshop | 17.09.2012 to 20.09.12 |
| 21. | PSG College of Technology | Three days “Research Intensive National Workshop on Cloud Computing” | CDAC Technical Hands on Workshop | 30.08.2012 to Sep 01, 2012 |
| 22. | National Institute of Technology, Trichy | Data Management on Cloud Computing Platforms | One Day Seminar | 01.08.2012 |
| 23. | National Engg College | IBM DB2 | IBM Workshop | 1 - 3 rd August, 2011 |
| 24. | National Engg College | Research Issues in Wearable Computing | DRDO Sponsored Seminar | 28, 29 th January, 2011 |

Specific Achievement if any

a. Software Development Team Member (NEC)

b. Industrial Certifications:

1. Certified “EMC Academic Associate” for Cloud Infrastructure and Services
2. Certified “EMC Academic Associate” for Data Science and Big Data Analytics
3. Certified “RPA Design and Development v1.0 – Educator” UiPath Academic Alliance

c. Diploma certifications under UiPath:

1. RPA Starter
2. RPA Developer Foundation
3. RPA Business Analyst Foundation
4. RPA Implementation Manager Foundation
5. RPA Skill-A-than

d. Mentor Student Funded Projects

- Received fund **Rs.2,50,000/-** from NewGenIDEC under NSTEDB, DTS for the project entitled “*Wireless Accessible Door Lock (WI-LOCK)*” during the academic year 2019-2020 and **patent Granted**.
- Received fund **Rs.2,50,000/-** from NewGenIDEC under NSTEDB, DTS for the project entitled “Multipurpose Walker aid for eldes” during the academic year 2022-2023 and patent filed.

Patent Granted Details:

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| Title: | A STEEKING AND UNBARRING TOOL |
| Application No: | 202241007605 |
| Patent No: | 552230 |
| Date of Grant: | 11.10.2024 |

Expert Lecture Delivered

| S.No | Title | Venue | Date |
|-------------|---|---|-------------|
| 1. | Runtime Environment | National Engg College , Anna University sponsored FDP on Compiler Design, organized by CSE Dept | 03.08.2023 |
| 2. | Minimum Spanning Tree and its application | National Engg College , Anna University sponsored FDP on Design and Analysis of Algorithm, organized by CSE Dept | 01.12.2018 |
| 3. | Usage of Natural Language on User Performance | CIIL Sponsored Seminar, Dept of CSE, National Engg college | 06.10.2016 |
| 4. | Expert lecture delivered on .Net Remoting, Assemblies and remote services | Visual Programming FDP, Einstein College of Engineering | 27.05.2015 |
| 5. | WAP Architecture, WIFI, WIMAX, Bluetooth | National Engg College , Anna University sponsored FDP on Mobile and pervasive computing, organized by CSE Dept | 16.06.2014 |
| 6. | RTP and RTCP | National Engg College , AICTE and SRM sponsored STTP on High Speed Networking, organized by CSE Dept | 11.06.2014 |
| 7. | Entity Centric business development | National Engg College , Anna University sponsored FDP on “Service Oriented Architecture”, organized by Dept of IT | 12.06.2014 |
| 8. | Practical Session-“invoking .NET components as web service“ | | |
| 9. | Cloud data storage | Government College of Engineering, Tirunelveli, Dept of CSE Association | 27.02.2014 |
| 10. | Hands on Hadoop – A Tool for Processing Big Data on cloud | National Engg College, Two days National Seminar on “ Research & issues of Bio Cloud” organized by CSE Dept | 21.09.2013 |
| 11. | Cloud technologies for Bioinformatics | National Engg College, 2 days National Seminar on “ Research & Pragmatic issues of Cloud Computing Genome analysis in Bioinformatics Applications” organized by IT Dept | 15.03.13 |

Membership in Professional bodies - Life Time Member - ISTE