

Dr. M. Viju Prakash, M.E., MISTE., Ph.D.,

Bachelor, Master, and Doctorate in Computer Science and Engineering, Member of IEEE, Madras Section, Member of Indian Society of Technical Education,

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Q Scopus Author ID: 56336100000

Academic Qualifications

2010 – 2016 Doctor of Philosophy (Ph.D.), in Computer Science and Engineering

Awarding University: M. S. University, Public University in India.

Specialization: Network Engineering.

Dissertation title: A Power Aware Routing Protocol for Wireless Sensor Networks

2005 – 2007 Master of Engineering (M.E.), in Computer Science and Engineering.

Awarding University: Anna University, Public University in India. Specialization: Computer Science and Engineering.

Thesis title: A guaranteed data delivery in Mobile Ad-hoc Networks (MANET).

Bachelor of Engineering (B.E.), in Computer Science and Engineering.

Anna University, Public University in India.

Specialization: Computer Science and Engineering.

Thesis title: An implementation of Elliptic Curve Cryptography (ECC) using Active HDL.

Professional Certifications

Oct 2024 Red Hat OpenShift Administration II: Configuring a Production Cluster (DO280)

Issued by RedHat Linux®

March 2023 Cisco Certified Network Associate (CCNA)

This certificate is valid through: March 8,2026

AWS Certified Solutions Architect - Associate

This certificate is valid through: March 25, 2026

Administrative Roles

Apr 2023 - Till date

Amazon Web Services Academy Head
Incharge and PoC (Point of Contact) for AWS Academy-related services.

Cisco Networking and Cyber Security Academy Head
Incharge and PoC (Point of Contact) for various Cisco Academy-related services.

■ Professional Certifications Expert and Consultant Incharge and Consultant for various student-centric Cisco, AWS and other professional certifications.

Mar 2024 – May 2024

Acting Head of School

Acting Head of School of Computing and Innovative Technologies.

Work Experience (13+ Years) Reverse Chronological Order

Apr 2022 – Till date	Senior Lecturer and Programme Lead. Department of Computer Science, Degree Awarding University: University of Staffordshire, UK, British University Vietnam, Ecopark, Hung Yen province, Hanoi, Vietnam.
Dec 2020 – Apr 2022	Assistant Professor. Department of Computer Science, Wollo University (Public University), Amhara, South Wollo, Ethiopia.
Oct 2019 – Sep 2020	Assistant Professor. Department of Computer Science, Knowledge University (Private University), Erbil, Iraq.
Oct 2017 – Oct 2019	Assistant Professor. Department of Computer Science, Wollo University (Public University), Amhara, South Wollo, Ethiopia.
Dec 2016 – Sep 2017	Assistant Professor. Department of Computer Science and Engineering, Rajagiri School of Engineering and Technology, Kochi, India.
June 2012 – Oct 2016	Assistant Professor. Department of Computer Science and Engineering, St. Xavier's Catholic College of Engineering, Nagercoil, India.
June 2011 – May 2012	Assistant Professor. Department of Computer Science and Engineering, DMI Engineering College, Nagercoil, India.
June 2010 – May 2011	Senior Lecturer. Department of Computer Science and Engineering, Sardar Raja College of Engineering, Tirunelveli, India.
Dec 2006 – May 2010	Lecturer. Department of Computer Science and Engineering, Francis Xavier Engineering College, Tirunelveli, India.

Selected Research Publications

Journal Articles

- Nirmala, K., Nareshkumar, R., **Viju Prakash, M**, Hussain, M. M., Indhumathi, S., Nirmalrani, & Vidhya, U. (2025). Improved extractive text summarization of user reviews using pre-trained transformer model (accepted for a publication). *International Journal of Intelligent Systems and Applications in Engineering*.
- Suja, P., Sharma, S. K., Veeranjaneyulu, M., & **Viju Prakash, M**. (2024). Cryptography-enhanced document image processing and analysis using deep learning on medical imaging datasets. *ICTACT Journal on Communication Technology*, 15(4), 3374–3379. Https://doi.org/10.21917/ijct.2024.0500
- Viju Prakash, M. (2023a). Improving the performance and reliability of rpl networks through security analysis and qos support. *i-manager's Journal on Information Technology*, 12(1), 15–22.

 Phttps://imanagerpublications.com/article/19825
- Viju Prakash, M. (2023b). A study on cloud container technology. i-manager's Journal on Cloud Computing, 10(1), 07–16. Ohttps://imanagerpublications.com/article/19935
- Joshua Samuel Raj, R., **Viju Prakash, M**, Prince, T., Vijayakumar, V., & Fredi, N. (2020). Web based database security in internet of things using fully homomorphic encryption and discrete bee colony

- optimization. *Malaysian Journal of Computer Science* (*Impact Factor: 0.6*), *Special Issue 1*(2020), 1–14.
 6 https://doi.org/10.22452/mjcs.sp2020no1.1
- Jeya Shobana, S., **Viju Prakash, M**, Sivaram, M., & Porkodi, V. (2019). Fccp ns: A fair congestion control protocol with n sinks in wireless sensor networks. *International Journal of Advanced Trends in Computer Science and Engineering*, 8(1.2), 43–51.

 *http://www.warse.org/IJATCSE/static/pdf/file/ijatcse08812sl2019.pdf
- Navis Vijilia, A., Suresh Suseela, J., & **Viju Prakash**, **M**. (2018). Capacity analysis based on graph theory for vanets. *Global Journal of Pure and Applied Mathematics*, 14(2), 263–274.

 https://www.ripublication.com/gjpam18/gjpamv14n2_08.pdf
- Kaliappan, M., Mariappan, E., **Viju Prakash, M**, & Paramasivan, B. (2016). Load balanced clustering technique in manet using genetic algorithms. *Defence Science Journal (Impact Factor: 0.58)*, 66(3), 251–258. Https://doi.org/10.14429/dsj.66.9205
- Paramasivan, B., **Viju Prakash**, **M**, & Kaliappan, M. (2015). Development of a secure routing protocol using game theory model in mobile ad hoc networks. *Journal of Communications and Networks* (*Impact Factor: 1.632*), 17(1), 75–83. Https://doi.org/10.1109/JCN.2015.000012
- Viju Prakash, M, & Paramasivan, B. (2015a). An individual node delay based efficient power aware routing protocol for wireless heterogeneous sensor networks. *International Journal of Communication Networks and Information Security*, 7(1), 50–59.

 Phttps://www.ijcnis.org/index.php/ijcnis/article/view/998/158
- Viju Prakash, M, & Paramasivan, B. (2015b). Request response based power aware routing protocol for wireless heterogeneous sensor networks. *International Journal of Multimedia and Ubiquitous Engineering*, 10(7), 59–74. 6 http://dx.doi.org/10.14257/ijmue.2015.10.7.07
- Viju Prakash, M, Paramasivan, B., & Kaliappan, M. (2015). Energy efficient dynamic load balanced clustering protocol using memory enhanced genetic scheme and elitism based immigrant genetic scheme for manet. *Journal of Pure and Applied Microbiology* (*Impact Factor: o.1*), 9, 655–665.

 Phttps://microbiologyjournal.org/archive_mg/jmabsread.php?snoid=3089&month=&year=
- Viju Prakash, M, & Paramasivan, B. (2014). Geographic relay region based power aware routing in wireless sensor networks. *Journal of Theoretical and Applied Information Technology*, 66(2), 586–594.

 http://www.jatit.org/volumes/Vol66No2/23Vol66No2.pdf
- Jeya Shobana, S., **Viju Prakash, M**, & Paramasivan, B. (2011). A survey on congestion control in wireless sensor networks (wsn). *Wireless Communication*, 3(5), 363–370.

 http://www.ciitresearch.org/dl/index.php/wc/article/view/WC042011009
- Viju Prakash, M, Jeya Shobana, S., & Alwin Infant, P. (2011). Wipe out brute force and malware based victim attacks using one-time password and grid-clear-captcha (gcc) analytical study. Networking and Communication Engineering, 3(3), 183–192.

 Phttp://www.ciitresearch.org/dl/index.php/nce/article/view/NCE032011006
- Viju Prakash, M, Paramasivan, B., & Jeya Shobana, S. (2011). Performance analysis of beaconless routing in wireless sensor networks (wsns) present and future. Wireless Communication, 3(5), 335–344.

 http://www.ciitresearch.org/dl/index.php/wc/article/view/WC042011006
- Viju Prakash, M, Jeya Shobana, S., & Alwin Infant, P. (2010). Eliminating vulnerable attacks using one-time password and passtext analytical study of blended schema. *Universal Journal of Computer Science and Engineering Technology*, 3(1), 133–142.
 - ♦ http://journaldatabase.info/journal/issn2219-2158

Conference Proceedings

- Viju Prakash, M, Tadesse Birara, A., & Alemu Jorgie, M. (2024). Securing network data with a novel encryption scheme, ISBN: 978-1-394-27227-3, Creative Approaches Towards Development of Computing, Multidisciplinary IT Solutions for Society, Wiley.
- Joshua Samuel Raj, R., Jeya Praise, J., **Viju Prakash, M**, & Sam Silva, A. (2020). Secure and efficient sensitive infohiding for data sharing via daces method in cloud, In *Springer proceedings of the international conference on intelligence in big data technologies beyond the hype,* Coimbatore, India. https://doi.org/10.1007/978-981-15-5285-4_62
- Viju Prakash, M, Porkodi, V., Rajanarayanan, S., Mujeebudheen Khan, S., Fareed Ibrahim, B., & Sivaram, M. (2020). Improved conservation of energy in fog iot services using machine learning model, In *IEEE international conference on computing and information technology, university of tabuk, saudi arabia*, Tabuk, Saudi Arabia. 4 https://doi.org/10.1109/ICCIT-144147971.2020.9213719
- Viju Prakash, M. (2015a). Averting ddos attack in a wireless network by using lisp architecture, In Proceedings of the international conference on recent trends in information and communication engineering, Tirunelveli, India.
- **Viju Prakash, M**. (2015b). Power aware route establishment in dynamic wireless sensor networks using an optimum relay, In *Proceedings of the international conference on knowledge collaboration in engineering*, Coimbatore, India.
- Viju Prakash, M. (2014a). Assured data delivery on wireless heterogeneous sensor networks by energy aware routing scheme, In *Proceedings of the international conference on emerging trends in engineering and technology*, Kollam, India.
- Viju Prakash, M. (2014b). A defence mechanism against energy depletion attacks in wireless sensor networks, In *Proceedings of the international conference on emerging trends in engineering and technology*, Kollam, India.
- **Viju Prakash, M**. (2014c). Guaranteed data delivery in heterogeneous wireless sensor networks by energy aware routing scheme, In *Proceedings of the 1st international conference on research vogues in information and communication technologies*, Aralvaimozhi, India.
- 9 **Viju Prakash, M**. (2014d). Preventing carousal and stretch attacks in wireless sensor networks, In Proceedings of the 1st international conference on research vogues in information and communication technologies, Aralyaimozhi, India.
- Viju Prakash, M, & Paramasivan, B. (2013). A broad revision of energy tree based power aware routing protocols in wireless sensor networks, In *Proceedings of the 1st international conference on advanced research in engineering technology*, Vijayawada, India.

Books and Chapters

- 1 Viju Prakash, M. (Expected: 2025). Soc implementations using prometheus, grafana and splunk.
- Viju Prakash, M, & Jeya Shobana, S. (Expected: 2025[a]). Cloud computing and type-1 hypervisor technology.
- **Viju Prakash, M**, & Jeya Shobana, S. (Expected: 2025[b]). Vmware vsphere and vmware vcenter server administration.

Skills

Server Technology AWS EC2, Lambda, FarGate, Azure VMs, Elastic Beanstalk, Terraform (IaC).

Authentication | IAM, AWS CLI Access

Databases and Coding Mysql, Postgresql, NoSQL, AWS Redshift, Python, Java

Micro Services AWS FarGate, AWS ECS, AWS EKS, Docker, Kubernetes, Jenkins, Flask API

Skills (continued)

Networking AWS VPC, VPC Peering (intra and inter-region), Hybrid cloud using OpenVPN and VPC, CCNA, CCNP Switching and Routing, Route 53, OpenSWAN.

Security Penetrative testing using Parrot/Black Arch OS, Kali Linux, Cyber Forensics using Autospy, FTK Imager and Wireshark.

Misc Azure PlayFab (Backend Cloud for Multiplayer Games), DevOps (CI/CD).

Configuration Ansible, GitHub, Splunk, Prometheus, Grafana, AWS CloudWatch.

Storage S3, EFS, EBS, SAN and NAS (LUN), vSAN

Virtualization Broadcom VMware vSphere ESXi (Type-1), VCSA, Citrix, Microsoft Hyper-V

Miscellaneous Experiences

Appreciations

Apr 2023 Session chair - National Symposium on Innovation and Challenges in Computing and Innovative Technologies for a Sustainable Future,

Appreciation from British University Vietnam.

Appreciation from Caterpillar Inc. Construction machinery and equipment company.

Mar 2016 National level Technical Symposium Phoenix 16,

Appreciation from St. Xavier's Catholic College of Engineering.

Dec 2015 Resource Person in National Digital Literacy Mission,

Appreciation from Department of Science and Technology, Government of India.

Mar 2015 Session chair - National Conference on Recent Trends in Information and Computer Technology,

Appreciation from St. Xavier's Catholic College of Engineering.

July 2014 | Innovation in Science Pursuit for Inspired Research,

Appreciation from Department of Science and Technology, Government of India.

Mar 2014 National Conference on Recent Trends in Computer Technology,

Appreciation from St. Xavier's Catholic College of Engineering.

Appreciation from Caterpillar Inc. Construction machinery and equipment company.

July 2013 | Innovation in Science Pursuit for Inspired Research,

Appreciation from Department of Science and Technology, Government of India.

Keynote / Faculty Development Programme (FDP) Conducted

Mar 2025 SoC Design and Implementation using Kali Linux and Splunk Enterprise,

Keynote given for Third International Conference of Intelligent Techniques in Computer and Engineering Science, Kerala, India.

Feb 2025 AI in Cyber Security,

International Five Days Faculty Development Programme, Ramco Institute of Technology, Tamil Nadu, India.

Nov 2023 Choosing the right certifications for you,

Sponsored by British University Vietnam to guide the students with the right certification path.

Mar 2020 Information Technology and its impact on Education,

Technical workshop sponsored by Knowledge University, Erbil.

Sep 2018 Internet of Things (IoT) and Smart Cities,

Technical talk was given to the students of Sri Parasakthi College for Women, India.

Miscellaneous Experiences (continued)

Aug 2018 International conference on "Smart city",

Keynote talk was given to the students of Ponjesly College of Engineering, India.

July 2017 **Design Project**,

Conducted one-week FDP in Rajagiri School of Engineering and Technology, India.

Jan 2017 **Training on Network Simulations using NS-2**,
Conducted two days FDP in Rajagiri School of Engineering and Technology, India.

Keynote / Faculty Development Programme Organized

May 2013

Technical workshop sponsored by Ministry of Human Resources, Govt of India.

June 2014 **Computer Programming**,

Technical workshop sponsored by Ministry of Human Resources, Govt of India.

Jan 2014 National Network Security Championship,

ACM and Indian Institute of Technology, New Delhi.

Main Workshop on Database Management Systems,

National Mission on Education through ICT, Govt of India.

Keynote / Faculty Development Programme Attended

Nov 2016 | IBM Certified Application Developer - Cloud Platform,

Sree Vidyanikethan Engineering College.

Sree Vidyanikethan Engineering College.

June 2016 | Grid and Cloud Computing Tools,

K S R Institute for Engineering and Technology.

Nov 2015 **Mobile Application Development**,

St. Xavier's Catholic College of Engineering.

Apr 2015 Introduction to Design of Algorithms,

Indian Institute of Technology Kharagpur.

Jan 2015 Formal Methods in Cryptography,

National Engineering College.

Dec 2014 Programming and Data Structures I,

St. Xavier's Catholic College of Engineering.

Sep 2014 Steps 2 Research,

Amal Jyothi College of Engineering.

June 2014 Mobile and Pervasive Computing,

National Engineering College.

May 2014 | Ubuntu Intermediate Course,

St. Xavier's Catholic College of Engineering.

Ubuntu Desktop Course,

St. Xavier's Catholic College of Engineering.

July 2013 Advanced VLSI Technology,

National Engineering College.

June 2013 Theory of Computation,

National Engineering College.

May 2013 Coordinators Workshop on Database Management Systems,

Indian Institute of Technology Bombay.

Miscellaneous Experiences (continued)

Nov 2012 Aakash for Education,

Indian Institute of Technology Bombay and Govt of India.

National Engineering College.

ware Architect,

IBM Software Education.

Jul 2011 Advanced Research in NS-2,

Sun College of Engineering.

Feb 2011 New-Fangled Network Architecture-Spawning Network,

National Engineering College.

Nov 2010 Working in NS2 - Network Simulator,

Karunya University.

June 2010 | Cloud Computing,

K S R Engineering College.

June 2009 Programmable Logic Controller and Supervisory Control and Data Acquisition,

Technocrat Automation Solutions Ltd.

Nov 2008 Server Administration for Internet,

Mepco Schlenk Engineering College.

July 2008 Recent Trends in Wireless Networks,

Madras Institute of Technology.

Details of Patent(s)

Sep 2019 Automatic Product Identification for the Shopping Cart by Using Smart Wireless Technology.

Membership in Professional Bodies

100415148 Member in IEEE, Madras Section,

IEEE New York.

LM75508 Lifetime member in Indian Society of Technical Education,

India.

111629 Lifetime member in International Association of Engineers,

Hong Kong.

80341040 Lifetime member in International Association of Computer Science and Informa-

tion Technology,

Singapore.

Google Scholar Citations

	All	Since 2019
Citations	167	78
h-index	6	5
i-10 index	6	4

Declaration

I am highly motivated to advance my career and am fully committed to working diligently toward achieving the goals of my organization. I hereby declare that the information provided above is true and accurate to the best of my knowledge.

Yours sincerely,

Dr. M. Viju Prakash, M.E., Ph.D.,

Last edited: July 30, 2025