# Vetriselvi. V. Ph.D.



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## **Employment History**

2015 – Present	<b>Professor,</b> Department of Computer Science and Engineering, CEG, Anna University.
2012 – 2015	Associate Professor, Department of Computer Science and Engineering, CEG, Anna University.
2009 – 2012	Assistant Professor, Department of Computer Science and Engineering, CEG, Anna University.
2003 – 2009	<b>Lecturer,</b> Department of Computer Science and Engineering, CEG, Anna University.
2000 – 2003	<b>Teaching Research Associate,</b> Department of Computer Science and Engineering,

### **Education**

2008	Ph.D., Anna University in Adhoc Networks.
	Thesis title: Trace based mobility model for QoS routing and resource sharing in mobile Ad Hoc
	Networks
1999	M.E., Madurai Kamaraj University in Communication Systems.

1997 M.E., Madurai Kamaraj University in Electronics and Communication Engineering.

CEG, Anna University.

### **Research Publications**

- K. Hemalatha and V. Vetriselvi, "Self-supervised learning using diverse cell images for cervical cancer classification," *Measurement: Journal of the International Measurement Confederation*, vol. 243, 2025.

  DOI: 10.1016/j.measurement.2024.116413.
- A. G. A. and V. V., "Sentiment analysis on a low-resource language dataset using multimodal representation learning and cross-lingual transfer learning," *Applied Soft Computing*, vol. 157, 2024. 
  ODOI: 10.1016/j.asoc.2024.111553.
- A. Amaithi Rajan, V. V, M. Raikwar, and R. Balaraman, "Smedir: Secure medical image retrieval framework with convnext-based indexing and searchable encryption in the cloud," *Journal of Cloud Computing*, vol. 13, no. 1, 2024. ODI: 10.1186/s13677-024-00702-z.
- N. Bharathi, R. Parthasarathi, and V. Vetriselvi, "Deep learning based bursty traffic discrimination and management using sandpile model," *Journal of Scientific and Industrial Research*, vol. 83, no. 10, pp. 1075–1085, 2024. ODI: 10.56042/jsir.v83i10.4981.
- M. Dhanapani and V. Vetriselvi, "Service function chaining on sdn/nfv based programmable data plane," in 2024 15th International Conference on Computing Communication and Networking Technologies, ICCCNT 2024, 2024. ODI: 10.1109/ICCCNT61001.2024.10724164.
- M. Dhandapani, V. Vetriselvi, and R. Aishwarya, "Coopai-route: Drl empowered multi-agent cooperative system for efficient qos-aware routing for network slicing in multi-domain sdn," CMES Computer Modeling in Engineering and Sciences, vol. 140, no. 3, pp. 2449–2486, 2024. DOI: 10.32604/cmes.2024.050986.
- A. Ganesh, L. Ravishankar, N. Sankar, D. Meignanamoorthi, and V. Vetriselvi, "Detection of link fabrication attacks in software-defined networks using dbscan," 2024. O DOI: 10.1109/ICCCNT61001.2024.10724900.

- A. M, D. M, A. Amaithi Rajan, V. V, and H. D, "Edgeshield: Attack resistant secure and privacy-aware remote sensing image retrieval system for military and geological applications using edge computing," *Earth Science Informatics*, vol. 17, no. 3, pp. 2275–2302, 2024. ODI: 10.1007/s12145-024-01256-z.
- D. Meignanamoorthi and V. Vetriselvi, "Drl-based customised resource allocation for sub-slices in 6g network slicing," *Transactions on Emerging Telecommunications Technologies*, vol. 35, no. 7, 2024. ODOI: 10.1002/ett.5016.
- P. Mohamed Ihsan, A. A. Rajan, V. Vetriselvi, G. Gautham Kumar, and R. Praveen Kumar, "Qcrypt: Advanced quantum-based image encryption for secure satellite data transmission," 2024. ODOI: 10.1109/ICEEICT61591.2024.10718453.
- A. Aruna Gladys and V. Vetriselvi, "Survey on multimodal approaches to emotion recognition," *Neurocomputing*, vol. 556, 2023. ODDI: 10.1016/j.neucom.2023.126693.
- S. Dhanasekar, D. Meignanamoorthi, and V. Vetriselvi, "Routing optimization using deep reinforcement learning in wireless software-defined edge network," 2023. ODOI: 10.1109/ICERCS57948.2023.10434088.
- L. Jai Vinita and V. Vetriselvi, "Federated learning-based misbehaviour detection on an emergency message dissemination scenario for the 6g-enabled internet of vehicles," *Ad Hoc Networks*, vol. 144, 2023. ODI: 10.1016/j.adhoc.2023.103153.
- L. Jai Vinita and V. Vetriselvi, "Impact of sybil attack on software-defined vehicular fog computing (sdvf) for an emergency vehicle scenario," *Lecture Notes in Networks and Systems*, vol. 383, pp. 809–825, 2023. ODI: 10.1007/978-981-19-4960-9\_61.
- H. K, V. V, M. Dhandapani, and A. G. A., "Cervixfuzzyfusion for cervical cancer cell image classification," *Biomedical Signal Processing and Control*, vol. 85, 2023. ODOI: 10.1016/j.bspc.2023.104920.
- L. J. Vinita and V. Vetriselvi, "Seafl: Transforming federated learning for enhanced privacy in 6g-enabled vehicles," 2023. ODI: 10.1109/AICERA/ICIS59538.2023.10420354.
- K. Hemalatha and V. Vetriselvi, "A survey on cervical cancer detection and classification using deep learning," *IFIP Advances in Information and Communication Technology*, vol. 654 IFIP, pp. 18–29, 2022. 
  DOI: 10.1007/978-3-031-16364-7\_2.
- K. Hemalatha and V. Vetriselvi, "Deep learning based classification of cervical cancer using transfer learning," in *Proceedings of the 2022 International Conference on Electronic Systems and Intelligent Computing, ICESIC 2022*, 2022, pp. 134–139. ODI: 10.1109/ICESIC53714.2022.9783560.
- L. Jai Vinita and V. Vetriselvi, A Survey on Security Aspects of Internet of Vehicles. 2022, pp. 41–67. URL: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85151029736&partnerID=40&md5=d3c534f10c1445df51d9237b55f8c831.
- V. J. Sudhakar, S. Mahalingam, V. Venkatesh, and V. Vetriselvi, "Phishing url detection and vulnerability assessment of web applications using ivs attributes with xai," *Lecture Notes in Networks and Systems*, vol. 314, pp. 933–944, 2022. ODI: 10.1007/978-981-16-5655-2\_89.
- A. K. Murthy, R. Parthasarathi, and V. Vetriselvi, "Security testbed for next generation mobile networks," 2020, pp. 122–129. ODDI: 10.1109/ISEA-ISAP49340.2020.235010.
- I. Ramesh, I. Sivakumar, K. Ramesh, V. P. P. Venkatesh, and V. Vetriselvi, "Categorization of youtube videos by video sampling and keyword processing," 2020, pp. 56–60. Ø DOI: 10.1109/ICCSP48568.2020.9182158.
- V. Vetriselvi, S. Pragatheeswaran, V. Thirunavukkarasu, and A. R. Arun, "Preventing forgeries by securing healthcare data using blockchain technology," *Advances in Intelligent Systems and Computing*, vol. 933, pp. 151–159, 2020. ODI: 10.1007/978-981-13-7166-0\_15.

- K. Archana Janani, V. Vetriselvi, R. Parthasarathi, and G. Subrahmanya VRK Rao, "An approach to url filtering in sdn," *Lecture Notes on Data Engineering and Communications Technologies*, vol. 15, pp. 217–228, 2019. ODI: 10.1007/978-981-10-8681-6\_21.
- N. Bharathi, V. Vetriselvi, and R. Parthasarathi, "Mitigation of dos in sdn using path randomization," Lecture Notes on Data Engineering and Communications Technologies, vol. 15, pp. 229–239, 2019. ODI: 10.1007/978-981-10-8681-6\_22.
- M. Harish, R. Karthick, R. Mohan Rajan, and V. Vetriselvi, "Securing coap through payload encryption: Using elliptic curve cryptography," *Lecture Notes in Electrical Engineering*, vol. 500, pp. 497–511, 2019.

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- K. Kirutika, V. Vetriselvi, R. Parthasarathi, and G. S. V. Rao, "Controller monitoring system in software defined networks using random forest algorithm," vol. 2019-October, 2019. October, 2019. 10.1109/CCST.2019.8888369.
- V. Vetriselvi, P. Shruti, and S. Abraham, "Two-level intrusion detection system in sdn using machine learning," *Lecture Notes in Electrical Engineering*, vol. 500, pp. 449–461, 2019. ODI: 10.1007/978-981-13-0212-1\_47.
- V. Gowtham, R. Baratheraja, G. Jayabarathi, and V. Vetriselvi, "Collaborative intrusion detection system in sdn using game theory," *Lecture Notes in Networks and Systems*, vol. 24, pp. 589–601, 2018. ODI: 10.1007/978-981-10-6890-4\_58.
- S. S, S. N. A, S. P. L, and V. V, "Intrusion detection system for software-defined networks using fuzzy system," *Lecture Notes in Networks and Systems*, vol. 24, pp. 603–620, 2018. ODI: 10.1007/978-981-10-6890-4\_59.
- J. Venkatesh, V. Vetriselvi, R. Parthasarathi, and G. Subrahmanya Vrk Rao, "Identification and isolation of crypto ransomware using honeypot," 2018. ODI: 10.1109/ICINPR043533.2018.9096875.
- S. Adithya, G. Gowtham Karthik, H. Hariharan, and V. Vetriselvi, "Assuaging cache based attacks in named data network," 2016, pp. 872–876. ODI: 10.1109/WISPNET.2016.7566256.
- V. Vetriselvi, C. Sugadev, P. Manimurugesan, N. Vignesh, and P. P. Rani, "E-mail application on named data networking using long lived interest," *Indian Journal of Science and Technology*, vol. 9, no. 8, 2016. ODOI: 10.17485/ijst/2016/v9i8/87970.
- S. Giri, A. Josyula, and V. Vetriselvi, "An e-mail application on named data networking," *Advances in Intelligent Systems and Computing*, vol. 325, pp. 779–787, 2015. ODI: 10.1007/978-81-322-2135-7\_82.
- B. Saranya and V. Vetriselvi, "Utilization of resources effectively by using an economic based model in opportunistic networks," 2014. 69 DOI: 10.1109/ICCCI.2014.6921758.
- S. Sowmya and V. Vetriselvi, "Data collection in spatially separated areas using wireless sensor networks," 2014. 69 DOI: 10.1109/ICCCI.2014.6921833.
- B. Poonguzharselvi and V. Vetriselvi, "Survey on routing algorithms in opportunistic networks," 2013. 
  O DOI: 10.1109/ICCCI.2013.6466129.
- V. Vetriselvi and S. Rangarajan, "Load balancing in qos aware mobile ad hoc grid," 2013. Ø DOI: 10.1109/ICCCI.2013.6466305.
- N. Santosh, R. Saranyan, S. Kumar P, and V. Vetriselvi, "Cluster based co-operative game theory approach for intrusion detection in mobile ad-hoc grid," 2008, pp. 273–278. ODOI: 10.1109/ADCOM. 2008. 4760460.
- V. Vetriselvi and R. Parthasarathi, "Trace based mobility model for ad hoc networks," 2007. Ø DOI: 10.1109/WIMOB.2007.4390875.

- S. Prasanna and V. Vetriselvi, "An improved intrusion detection technique for mobile adhoc networks," Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), vol. 3816 LNCS, pp. 364–376, 2005. DOI: 10.1007/11604655\_42.
- V. Vetriselvi and R. Parthasarathi, "Secure communication for multi-path ad-hoc network," vol. 2, 2003, pp. 1086–1090. URL: https://www.scopus.com/inward/record.uri?eid=2-s2.0-2342547067&partnerID=40&md5=042f677164e724bc054724ccdec20be4.

### Guidance

Hemalatha Medical Image Processing (Thesis Submitted)

Meignaanamoorthi D Next Generation Networks (Thesis Submitted)

Bharathi N A Network Security (Thesis Submitted)

Aruna Gladys Multimodal sentiment Analysis (Ongoing)

Arun Amaithi Rajan Secure Multimedia Storage and Retrieval (Ongoing)

## **Miscellaneous Experience**

#### **Awards and Achievements**

Best Paper Award, International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2024)

■ **Best Paper Award**, International Conference on Computational Intelligence in Data Science (ICCIDS - 2023)

2018 **Best Paper Award**, IEEE Fourteenth International Conference on Information Processing, India

2014 **Best Project Award**, TCS, India

### Membership

1999 - Present

- The Institution of Electronics and Telecommunication Engineers
- The Indian Society for Technical Education