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| REVATHY GANAPATHY |
| 301, Tower-1, Unihomes-2, Unitech, Nallambakkam, Chengalpattu, Kancheepuram, Chennai 600127, Tamilnadu, India |
| Email: grevathy19@gmail.com Tel: +91-9566290952 |

## EDUCATION

Nov 2019 - present **Doctor of Philosophy (PhD) in Computer Science and Engineering**

Vels Institute of Science, Technology and Advanced Studies, India

 Thesis title: Study of abnormal behaviors of physical parameters in physical and engineering applications using machine learning techniques

Area of specialization: Cyber security, Machine learning, Deep learning, Wireless networks

Jan 2011 - Nov 2013 **Master of Engineering in Computer Science and Engineering**

Anna University, India

Grade: “First Class with Distinction" Percentage: 88.9%

Thesis title: Optimal and Distributed Scheme for Congestion and Power Control in Wireless Networks

Jul 2006 - May 2010 **Bachelor of Technology in Information Technology**

Anna University, India

Grade: “First Class with Distinction" Percentage: 80.0%

Project title: Wireless Content Management (Wi-Con) using Mobile Devices

## PROFESSIONAL EXPERIENCE

July 18 2022- Present **Assistant Professor**

 **Department of Computer Science and Engineering,**

 **Vels Institute of Science, Technology and Advanced Studies,**  **India**

Nov 2019 – July 2022 **Junior Research Fellow**

 **Vels Institute of Science, Technology and Advanced Studies,**  **India**

Description: Worked as Junior Research Fellow within a project co-funded by Department of Science and Technology (DST), Government of India. Project is entitled *"Design A Prototype Configuration Model for the Vessel Tracking System for The Benefit Of Fishermen Community And Extend the Configuration to the Tamil Nadu Coastline From Chennai To Kanyakumari”.* Principal Investigator: Dr. E. N Ganesh, Co-Investigator: Dr. V. Rajendran. Involved in writing project proposals to avail funding of future projects. Assisted in departmental activities and taught courses to undergraduate students.

Dec 2015 - May 2016 **Assistant Professor**

(6 months)  **Department of Computer Science and Engineering,**

 **QIS College of Engineering, India**

Description: Involved in teaching theory and laboratory courses to undergraduate students.

Sep 2010 - Apr 2013 **Assistant Professor**

(2 years, 7 months) **Department of Computer Science and Engineering,**

 **Rajas Institute of Technology for Women, India**

Description: Involved in teaching theory and laboratory courses to undergraduate students.

## PROGRAMMING SKILLS

C/C++ (proficient),

Java (proficient),

Python (proficient),

R (proficient),

MS-Office (proficient)

## AWARDS AND ACHIEVEMENTS

Jan 2011 - Nov 2013 During Master program: Secured 1st rank in class (of 25 students),

 Secured 1st rank in “Advanced data structures and algorithm” course in class

Jul 2006 - May 2010 During Bachelor program: Secured 3rd rank in class (of 27 students),

 Secured 1st rank in “Operating System” course in class

Others Secured second rank in State level Universal Talent Search Examination conducted by Shakespeare Institute of English Studies

## LANGUAGES

English Writing, Speaking, Reading (Proficient)

Tamil Writing, Speaking, Reading (Mother tongue)

Hindi Writing, Speaking, Reading (Intermediate)

## PROFESSIONAL ACTIVITIES

June 2020 Completed Faculty Development program on Artificial Intelligence in association with AICL

May 2020 Participated in Faculty Development Program on "Robotic Process Automation and its allied Machine Learning Techniques" organized by Department of Electronics and Communication Engineering, Vels Institute of Science, Technology and Advanced Studies in association with Elektroniklab India Private Limited

May 2020 Participated in Faculty Development Program on “Machine Learning for Beginners”, organized by Department of Electrical and Electronics Engineering, Sathyabama Institute of Science and Technology in association with Indian Servers

## EXTRA-CURRICULAR ACTIVITIES

Participation in sports

Watching sport events

## PROFESSIONAL REFERENCES

1. Dr. Velayudam Rajendran, (PhD supervisor)

Director and Professor,

Department of Electronics and Communication Engineering,

Vels Institute of Science, Technology and Advanced Studies, Chennai 600117, India

Email: director.ece@velsuniv.ac.in

Phone: +91-94453 94824

1. Dr. R. A.Karthika,

Associate Professor,

Department of Computer Science and Engineering,

Vels Institute of Science, Technology and Advanced Studies, Chennai 600117, India

Email: karthika.se@velsuniv.ac.in

Phone: +91-99948 39194

## LIST OF PUBLICATIONS

SCI indexed journals

1. Ganapathy Revathy, Kumar P., Rajendran V. (2021). Development of IDS using mining and machine learning techniques to estimate DoS malware. **International Journal of Computational Science and Engineering**. Vol. 24. 259. DOI: 10.1504/IJCSE.2021.115646.
2. Dr. E.N.Ganesh, Rajendran, V., Ravikumar, D., Saikumar, P., Ganapathy, Revathy, Harivardhan, P.. (2021). Detection and Route Estimation of Ship Vessels using Linear Filtering and ARMA Model from AIS Data. **International Journal of Oceans and Oceanography**. Vol. 15. pp.1-10.
3. Dr. E.N.Ganesh, Rajendran, V., Ravikumar, D., Kumar, P., Ganapathy, Revathy, Harivardhan, P.. (2021). Remote Sensing Analysis Framework for Maritime Surveillance Application. **International Journal of Oceans and Oceanography**. Vol. 15. pp. 11-17.

Scopus indexed journals and conferences

1. G. Revathy, V. Rajendran, P. Sathish Kumar, AIP Conference Proceedings **2463**, 020015 (2022); <https://doi.org/10.1063/5.0080211>
2. G. Revathy, V. Rajendran, B. Rashmika, P. Sathish Kumar, P. Parkavi, J. Shynisha “Random Forest Regressor based superconductivity materials investigation for critical temperature prediction”, Materials Today: Proceedings, 68(2022), 648-652, https://doi.org/10.1016/j.matpr.2022.03.515.
3. Revathy Ganapathy, Rajendran V., P. Sathish Kumar, S. Vinuharini, G.N. Roopa (2022) Smurf attack using hybrid machine learning technique, International Conference on Recent Innovations in Science and Technology, RIST 2021, January 2022, DOI: [10.1063/5.0080211](http://dx.doi.org/10.1063/5.0080211)
4. G. Revathy, V. Rajendran, B. Rashmika, P. Sathish Kumar, P. Parkavi, J. Shynisha (2022). Random Forest Regressor based superconductivity materials investigation for critical temperature prediction. Materials Today: Proceedings. 10.1016/j.matpr.2022.03.515.
5. Ganapathy Revathy, Rajendran, V., Kumar P. (2020). Prediction study on critical temperature (C) of different atomic numbers superconductors (both gaseous/solid elements) using machine learning techniques. Materials Today: Proceedings. 44. 10.1016/j.matpr.2020.10.091.
6. Ganapathy Revathy, Affan Syed, Suriya M., Kumar P., Rajendran, V. (2020). Optimization study on competence of power plant using gas/steam fluid material parameters by machine learning techniques. Materials Today: Proceedings. 37. 10.1016/j.matpr.2020.07.245.
7. P. Sathish Kumar, A.U. Deepika, A. Abbarna, Revathy G., B. Ebenezer, Abishek (2020).“ Rainfall Forecasting using Machine Learning Techniques”, Journal of Xidian University, Vol. 14 (6), pp. 2177-2189, DOI: https://doi.org/10.37896/jxu14.6/261.
8. Revathy G. (2013). “Optimal and Distributed scheme for Congestion and power control in Wireless Networks”, International Seminar on Computer Vision, Dr. Sivanthi Adithanar College of Engineering, Tiruchendur, India, 9 Oct 2013.

**Best Paper awards**

1. Revathy G has received best paper award for the papertitled **“An Ensemble-Extra Tree approach based Traffic Flow Classification in Software Defined Network”** in the International Conference **“Communication, Cyber security, Robotics, Artificial Intelligence and IoT (ICCCRAI)”** conducted on 24th June 2022**, organized by Annai Vailankanni college of Engineering, Kanyakumari, India.**

**Conference Awards**

1. REVATHY G has participated and presented a paper titled **“SMURF ATTACK USING HYBRID MACHINE LEARNING TECHNIQUE”** in the International Virtual Conference **“Recent Innovations in Science & Technology (RIST 2021)”** conducted on 19th & 20th June2021, organized by **ERANAD Knowledge City Technical Campus, Malappuram, Kerala, India** in association with **ISET Research** & **HEXAIND Technologies and Services**.
2. Revathy G has participated and presented a paper titled **“An Ensemble-Extra Tree approach based Traffic Flow Classification in Software Defined Network”** in the International Conference **“Communication, Cyber security, Robotics, Artificial Intelligence and IoT (ICCCRAI)”** conducted on 24th June 2022**, organized by Annai Vailankanni college of Engineering, Kanyakumari, India.**