

PROFILE

Dr.P.Supraja M.E, Ph.D.,

Assistant Professor, School of Computing,
SRM Institute of Science and Technology,
Kattankulathur, Chennai, Tamilnadu, India - 603203

Mobile: +91- 9786331333

E-Mail: suprajap@srmist.edu.in, p.supraja18@gmail.com



Personal Details

Father's Name : K. Perumal
Date of Birth : 04-Jan-1990
Age : 30
Gender : Female
Marital Status : Married
Husband's Name : K. Sasikumar
Nationality : Indian
Mother Tongue : Tamil
Languages Known : Tamil, Telugu, English

Educational Details

Degree/Qualification	Marks	University/Institution/School	Graduated Year
Ph.D (I &C)	-	Anna University	2017
M.E (CSE), Anna university	8.5 (CGPA)	Adhiparasakthi Engineering College, Melmaruvathur.	2012
B.E (CSE), Anna university,	80%	Adhiparasakthi Engineering College, Melmaruvathur.	2010
XII (State Board)	83.3%	Adhiparasakthi Matric Higher Sec School, Melmaruvathur.	2006
X(Matriculation)	81.3%	Adhiparasakthi Matric Higher Sec School, Melmaruvathur.	2004

Specialization: Machine learning, Cognitive intelligence, Optimization Algorithms,
Visualization

Awards and Honors

- Indo-US WISTEMM Fellow at University of Southern California, Los Angeles funded by DST Govt of India & IUSSTF – Jan to June 2020
- Selected for “Insc Best Teacher Award” by Institute of Scholars
- Selected for “Innovative technological Research & Excellent Professional Achievement Award" by The society of innovative Educationalist & Scientific Research professional, Accredited with Innovative scientific research professionals Malaysia
- Received International Distinguished Young Researcher Award 2020 by Green Thinkerz, 17th May 2020
- Post-Doctoral Research Associate at Northumbria University, Newcastle, UK - 2019
- Received “Young Women in Engineering – 2019” Award by the Centre for Advanced Research and Design of Venus International Foundation , March 2nd 2019
- Received Gold Medal “Best Research Paper Award” for Research day organized by SRM IST, Feb 28th 2019
- Proud Award of Inventor and Researcher by Allinnov Research and Development Pvt Ltd on Nov 23rd 2018
- Awarded 34th rank in the Degree of Master of Engineering in June 2012.

Funding Obtained

- Received Rs.16,75,200 for Indo-US WISTEMM women Overseas Fellowship Program at University of Southern California, Los Angeles by DST Govt of India & IUSSTF - Jan 2020
- Received Rs.4,13,333 for Conducting STTP sponsored by AICTE, India - Mar 2020

PUBLICATIONS Patent Published - 6

- Title of the invention : “An Apparatus and Method for Recognizing a Person using Gait Parameters” Application No. 201941053621 A, The Patent Office Journal No. 1/2020 Dated 03/1/2020, pg.no 208
- Title of the invention : “A System For Generating Captions For Video Frames And A Method Thereof” Application No. 201941049570 A, The Patent Office Journal No. 51/2019 Dated 20/12/2019, pg.no 61314
- Title of the invention : “Flood Drainage System” Application No. 201841042709 A, The Patent Office Journal No. 47/2018 Dated 23/11/2018, pg.no 44339
- Title of the invention : “A Forest Monitoring System” Application No. 201841035749 A, The Patent Office Journal No. 39/2018 Dated 28/09/2018, pg.no 36422

- Title of the invention : “A Method For Color Image Segmentation Using Dynamic Histogram Based Rough-Fuzzy C Means” Application No.201841020507 A, The Patent Office Journal No. 25/2018 Dated 22/06/2018, pg.no 22928
- Title of the invention : “Compact Multi-Functional Smart Laptop” Application No. 201841002061 A, The Patent Office Journal No. 04/2018 Dated 26/01/2018, pg.no 3089

Journal Publications (9 SCI, 6 Scopus)

SCI

- Pitchai R, Supraja P*, HelenVictoria, Madhavi M, June 2020, “Brain Tumor Segmentation using Deep Learning And Fuzzy K-Means Clustering for Magnetic Resonance Images”, Neural Processing Letters by Springer, Impact factor: 2.891
- Supraja P, Babu S, Gayathri V.M, Divya G, June 2020, “Hybrid genetic and shuffled frog-leaping algorithm for neural network structure optimization and learning model to predict free spectrum in cognitive radio”, International Journal of Communication Systems by John Wiley <https://doi.org/10.1002/dac.4532> Impact factor: 1.319
- Supraja P, Pitchai R, Raja, Apr 2019, “Spectrum Prediction In Cognitive Radio With Hybrid Optimized Neural Network”, Mobile networks and Applications by Springer, article/DOI: 10.1007/s11036-017-0909-7, Volume 24, Issue 2, pp 357–364 Impact factor: 3.259
- Pitchai R, Babu S, Supraja P, Anjanayya S, Apr 2019 “Prediction of Availability and Integrity of Cloud Data Using Soft Computing Techniques”, Soft Computing by Springer <https://link.springer.com/article/10.1007/s00500-019-04008-0>, Impact factor: 2.36
- Shanthini A, Vinodhini, Chandrasekaran, Supraja P*, 2019 “A Taxonomy on Impact of Label Noise and Feature Noise Using Machine Learning Techniques”, Soft Computing by Springer, 10.1007/s00500-019-03968-7, Impact factor: 2.36
- Naresh R, Supraja P*, Sayee kumar, G.M. Karthick, 2019 “Attribute Based Hierarchical File Encryption for Efficient Retrieval of Files by DV index tree from Cloud using Crossover Genetic Algorithm”, Soft Computing by Springer, (<https://link.springer.com/article/10.1007%2Fs00500-019-03790-1>) Impact factor: 2.36
- Supraja P, Gayathri V.M, Pitchai R, 2018, “Optimized Neural Network for Spectrum Prediction Using Genetic Algorithm in Cognitive Radio Networks”, Cluster Computing by Springer, article/DOI: 10.1007/s10586-018-1978-5, Impact factor: 2.04
- Supraja P, Jayashri, S , 2017, “Optimized Neural Network For Spectrum Prediction Scheme in Cognitive Radio”, Wireless Personal Communication, Springer, Vol 94, issue4, pp 2597-2611 ISSN:0929-6212, Impact factor: 1.20

- Supraja P, Jayashri, S , 2017, “Subcarrier and Power Allocation For Ofdma-Based Cognitive Radio Systems With JOUSAM For Tele Medicine Application”, Research Journal of Biotechnology - ISSN: 0973-6263 / 2278-4535, Impact factor: 0.23

SCOPUS

- Gayathri V.M, & Supraja P, 2020, “Optimized RBIDS: Detection and Avoidance of Black Hole Attack through NTN Communication in Mobile Adhoc Networks”, International Journal of Computer aided Engineering and Technology, ISSN online: 1757-2665, <http://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijcaet>, Impact factor: 0.3
- J.Srinivasulu Reddy, Supraja P, Sep 2019, “Virtual Migration with the Help of Cloud Simulator to Balance the Data Load”, International Journal of Recent Technology and Engineering, ISSN: 2277-3878, Vol 8, Issue 3, pp 5681-5685
- Anusha G, & Supraja P, 2018, “Energy aware dynamic virtual machine consolidation in cloud data centers” International Journal of Engineering and Technology <https://www.sciencepubco.com/index.php/ijet/article/view10519> Vol 7, No 2.8
- Pitchai R, Supraja P, & Raja, 2017, “Education as a Service through Cloud Book”, International Journal of Pure and Applied Mathematics, ISSN:1311-8080 / 1314-3395, Vol 116, issue 24, pp 43-50, Impact factor: 0.6
- Pitchai R, Supraja P, & Raja, 2017, “Registering Grievances in District office using Cloud System”, International Journal of Pure and Applied Mathematics, ISSN:1311-8080 / 1314-3395, Vol 116, issue 24, pp 51-58, Impact factor: 0.6
- Gayathri V.M, & Supraja P, 2017, “Statistical Method to Analyze and Compare Energy Dispersion of Various D2d Protocols”, International Journal of Pure and Applied Mathematics, ISSN:1311-8080 Vol 117, issue 15, pp 1103-1109, Impact factor: 0.6
- Supraja P, SaiSanthiya D, Ranjini M, 2019, “Analysis of Road Traffic Lethal Mishap using Map Reduce Techniques”, Journal of Computational and Theoretical Nanoscience, Impact factor: 0.4 (Paper Accepted for publication)
- Ravi Shekhar Tiwari, Supraja P, 2019, “Enhanced Prediction Accuracy of Gait Recognition using Convolution Neural Network”, Journal of Computational and Theoretical Nanoscience, Impact factor: 0.4 (Paper Accepted for publication)

Working Project and Papers

- 3D Gait Recognition
- Video Captioning
- Hybrid Optimization Algorithms
- Smart Air pollution control using Machine Learning

Conference Paper Presented

- Published Paper titled “Flow Distribution Aware Load Balancing for Data Centre over Cloud Services with Virtualization” In Two Days Springer International Conference on Computational Vision and Bio Inspired Computing, on 29th - 30th Nov 2018.
- Published Paper titled “Energy- aware Virtual Machine Consolidation in Cloud Data Centers” In Two Days IEEE International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing, on Jan, 2018.
- Presented Paper titled “Subcarrier and Power Allocation For Ofdma-Based Cognitive Radio Systems With JOUSAM” In Two Days International Conference on Emerging Multidisciplinary Research and Computational Intelligence – 2016, Andhra Pradesh, on Dec, 2016.
- Presented Paper titled “An Adhoc Node Tracking System With the Support of Cloud to Device Messaging and Bluetooth” in Two Days International Conference on Innovations in Contemporary IT Research, On Feb, 2012
- Presented Paper titled “Digital Elevation Modes of The Lunar Surface From Chandrayaan-1 Terrain Mapping Camera Imaginary Result” in Two Days National Conference on Radar and Satellite Imaging, On Dec, 2011.
- Presented Paper in “Research Symposium On Pervasive Computing And Its Underlying Technologies” On Sep, 2011.
- Presented Paper titled “A Novel Security Scheme for Wireless Adhoc Network“ in The National Conference on Innovation in Computers, On Aug, 2011.
- Presented Paper titled “Virtualization For Cloud Computing With QoS Requirements” in The National Conference on Ambient System and Technologies, on March, 2011.
- Participated In “National Conference On Image Processing” on Feb, 2011.

Academic Experience

- Assistant Professor, Department of Information Technology, SRM Institute of Science and Technology since June 14th 2017 - till dated.
- Assistant Professor, Department of Computer Science and Engineering, Adhiparasakthi Engineering College for 1 year (from June 6th 2016 to Apr 28th 2017).
- Full Time Research Fellow with Regular Teaching Assignments at Adhiparasakthi Engineering College for 4 years (from May 3rd 2012 to June 3rd 2016).

Courses Handled: Web Programming, Operating System, Integrative Programming and Technology, Visualization Techniques, Cognitive Radio, Virtualization, Cloud Computing, Forensics and Incident Response, Malware, Cryptography, Wireless Communication, High Performance Networks, Grid Computing, Internet Programming, Total Quality Management, Programming C, Object Oriented Programming.

Other Details

Industry / Internship Programme

- Underwent 1 week Faculty Industry Immersion Program at Allinnov Research and Development (P) Ltd (17th To 22th December 2018)

Hackathon

- Coordinator for Smart India Hackathon, 2019 Organized by MHRD, MIC, AICTE at SRM IST – Chennai

Participation in Summer/Winter School Programme /International Submit

- Participated in 3 days RBCDSAI's International Submit on Data Science and AI organized by Robert Bosch Centre for Data Science and Artificial Intelligence, Indian Institute of Technology Madras (18th to 20th June 2020)
- Attended 5 Days Short Term Training Programme On "Cloud Orchestration Using SDN and Openstack COCOS2018" in SRM Institute of Science and Technology (24th To 28th September 2018)
- Attended 5 Days Summer School Training Programme On "Artificial Intelligence With Deep Learning & Machine Learning" in Hindustan Institute of Technology And Science (25th To 29th June 2018)
- Attended Two Week Summer / Winter School Programme On “Use of Mathematical Complexity and Advance Cryptographic Techniques in Network Security” in Adhiparasakthi Engineering College on May, 2015

Online Courses Completed

- Certificate of Achievement on Completion of Training Program on “Introduction to Artificial Intelligence” from Simplilearn Score : 95% (May 22nd, 2020)
- Certificate on completion of 14.5 hours (111 modules) Online Course on “Machine Learning, Data Science and Deep Learning with Python” from Udemy (Feb 12, 2020)
- Certificate on completion of 1 hour (13 modules) Online Course on “How to Validate any Business Idea” from Udemy (Feb 12, 2020)
- Diploma of Completion UIPath Licensing Training (June 2nd 2019)
- Diploma of Completion RPA Starter Training from Uipath (June 2nd 2019)
- Diploma of Completion UIPath Advanced Training from Uipath (June 10th 2019)
- Certificate on completion of 12.5 hours (78 modules) Online Course on “Build Responsive Real World Websites with HTML5 and CSS3” from Udemy (Jan 23, 2019)

- Certified Salesforce Trailhead Developer earned 17 Badges
- Certificate on completion of 23 hours (184 modules) Online Course on “Deep Learning A-Z™ : Hands-On Artificial Neural Networks” from Udemy (Dec 15, 2018)
- Certificate on completion of 2 hours (17 modules) Online Course on “Deep Learning™ with Keras Simplified for Absolute Beginners” from Udemy (Dec 15, 2018)
- Certificate on completion of 41 hours (40 sections, 292 modules) Online Course on “Machine Learning A-Z™ :Hands-On Python & R In Data Science” from Udemy (5th June 2018 – 27th Aug 2018)
- Certificate on completion of 1 hour (8 modules) Online Course on “PT Gait Analysis and Deviations” free course from Udemy (Aug 27, 2018)
- Certificate on completion of 8 hours (56 modules) Online Course on “PHP: Complete Login and Registration System with PHP & MySQL” from Udemy (Aug 3, 2018)
- Certificate on completion of 54 hours (374 modules) Online Course on “The Complete Android & Java Developer Course – Build 21 Apps” from Udemy (Aug 3, 2018)
- Certificate on completion of 4 weeks Online Course “HTML5 Application Development Fundamentals” from Microsoft Technology Associate on July, 2018, Final Course Grade: 98%
- Certificate on completion of 4 weeks Online Course “Database Administration Fundamentals” from Microsoft Technology Associate on June, 2018, Final Course Grade: 80%
- Certificate on completion of 7 weeks Online Course “Programming for Everybody (Getting started with python)” from Coursera, University of Michigan on Feb, 2018, Final Course Grade: 96.6%
- One of the Top coder in PDD (eLab), Jan 2018.
- Secured Rank 1 completing 100% in MATHs lab (eLab), Aug 2018
- Certificate on completion of 4 weeks Online Course “Big Data 101” from Cognitive class, BigData University on July, 2017.
- Undergone Training in Dotnet conducted by HP Education India.

Resource Person / Delegate / Speaker

- Speaker on Topic “Importance of Mindset and Team Building” at “Entrepreneurship Awareness Camp” Organized by SRM Institute of Science and Technology (27th To 28th June 2019)

FDP/ Workshops/ Seminars/Webinar Organized

- Organized and Attended International Webinar on "New Technology in HealthCare : An Overview of Mobile Health Virtual Reality" at SRM Institute of Science and Technology 22nd June, 2020.
- Organized and Attended 5-Days Faculty Development Programme on "Robotic Process Automation" at SRM Institute of Science and Technology from 3rd to 7th June, 2019.
- Organized 6-Days Student Training Programme on "Salesforce-Trailhead" at SRM Institute of Science and Technology from 1st to 6th April, 2019.
- Organized 5-Days Faculty Development Programme on "Salesforce-Trailhead" at SRM Institute of Science and Technology from 5th to 9th March, 2019.
- Organized HPCC Super Computer Meet for IT Faculties on 25th Sep 2018.

Participation in FDP

- Attended 5 Days FDP on “Advance Course on E-Content Development” Program conducted by International Institute of Organized Research on 18th to 23rd June, 2020.
- Attended 5 Days FDP on “E-Content Development” Program conducted by International Institute of Organized Research on 1st to 5th June, 2020.
- Attended One Day FDP on “Change in Learning Approach” Program conducted by Cognizant on 5th July, 2019.
- Attended Three Days FDP on “Design the Thinking” Residential program conducted by Intellect – School of Design Thinking on 14th to 16th Mar 2019.
- Attended One Day FDP on “Web Security” conducted by TCS in SRM University on 17th Mar, 2018.
- Attended Three days FDP on “Network Simulator-2 for Beginners” on Nov, 2010.

Participation in Workshops

- Attended Two Days National Workshop On “Fundamentals of Virtualization” conducted by SRM Institute of Science and Technology on 24th & 25th Jan, 2019.
- Attended Two Days National Workshop On “Human Cognition and Emotion Adapting AI Techniques” conducted by SRM Institute of Science and Technology on 6th & 7th Sep, 2018.
- Attended Two Days National Workshop On “Advances in Positioning, Navigation and Communication” conducted by SRM Institute of Science and Technology on 16th & 17th Aug, 2018.

- Attended Three Days Workshop On “Cognitive Radio Networks – Enabling Technologies and Challenges” in Anna University on Jan, 2015.
- Attended Two Days Workshop On “RF, SDR Fundamental and Programming” in SRM University on Mar, 2014.
- Attended Two Days Workshop On “An Ultimate Approach To Software Testing” on Aug, 2011.

Participation in Seminars/Webinar/Virtual Workshop

- Participated in Two days International Virtual Workshop on “The Craft of Research” organized by Department of Mathematics, SRMIST Ramapuram on 2nd & 3rd of July 2020.
- Participated in International Webinar on “Developing a Community-driven IoT Data Marketplace for Smart Cities: Is there a role for Blockchain?” organized by Department of Computer Science and Engineering, BVRIT on 29th June 2020.
- Participated in Webinar on “e-Content Dissemination & Collaborative Learning using Wakelet” organized by Sustainable Cosmos Community, India in Academic Associate with Wakelet on 23rd June 2020.
- Participated in Webinar on “Traffic Engineering in Inter Data Center Bulk Data Transfers” organized by Department of Computer Science and Engineering, SRM IST on 29th May 2020.
- Participated in Webinar on “The Real Time Simulation of Industry 4.0 Eco system for Manufacturing Industry” organized by Department of Computer Science and Engineering, SRM IST on 28th May 2020.
- Participated in Webinar on “Developing City-Scale IoT Applications using Data Marketplace” organized by Department of Computer Science and Engineering, SRM IST on 27 May 2020.
- Participated in Webinar on Digital transformation organized by Department of Computer Science and Engineering, SRM IST on 25 May 2020.
- Participated in “Two Days Seminar On Wireless Sensor Networks And Its Application” on July 2011.

Professional Memberships

- IEEE -Institute of Electrical and Electronics Engineers (Member id: 91096586)
- IAENG – International Association of Engineers (Member id: 215966)
- IEDRC- International Economics Development Research Center (Member id: 90081191)
- SDIWC - The Society of Digital Information and Wireless Communications_(Member id: 22063)
- ICSES - International Computer Science and Engineering Society (Member id: 2566)

- ISCA – Indian Science Congress Association
- SIESRP - Society of Innovative Educationalist & Scientific Research Professional (Member id: LM171899298)
- InSc – Institute of Scholars (Member id : InSc2020A07A)
- I2OR – International Institute of Organized Research (Member id: I2OR/2020/00008)

Journal Reviewer

- Signal Processing: Image Communication – Elsevier (SCI Indexed Journal)
- International Journal of Electronics and Communications – Elsevier (SCI Indexed)
- Wireless Networks by Springer (SCI Indexed)
- Reviewer for International journal “Measurement and Control” by SAGE (SCI Indexed)
- Evolving System by Springer (SCI Indexed Journal)
- Reviewer for International journal of Information Security and Privacy (IJISP) by IGI Global (Scopus Indexed)

Responsibilities

- PhD Supervisor – Guiding 4 Research Scholars (1 Fulltime, 3 Part-time)
- Doctoral Research Committee Member
- SIIC Residential Mentor
- Coordinator - IEEE Robotics and Automation Society
- Faculty Advisor
- Student Counselor
- Coordinator for SRM Salesforce
- SRM Counselling Committee Member
- Department Josh Coordinator & won Overall Trophy – 2018

Declaration

I pledge and pronounce that all the above information is true to best of my knowledge.

Dr. P. SUPRAJA