

Dr R.ArunPrakash

Assistant Professor SI Gr

Department of Computer Science and Engineering

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**Research Area:**

Biometric Authentication and Pin Distribution based Architecture for Secure Mobile Commerce Applications.

Educational Qualifications:

QUALIFICATION	DEPARTMENT	UNIVERSITY	YEAR (From -To)	CLASS
Ph.D	Computer Science & Engineering	Anna University, Chennai	2008-2016	
M.Tech	Information Technology	Sathyabama University, Chennai	2003-2005	First Class with Distinction
B.Tech	Information Technology	Bharathidasan University, Tiruchirappalli	1999-2003	First Class

Experiences:

NAME OF THE NSTITUTION	DESIGNATION OF POST	FROM	TO
University College of Engineering BIT Campus Tiruchirappalli	Assistant Professor SI Gr	13-07-2023	Till Date
University College of Engineering Ariyalur	Assistant Professor	05-03-2011	12-07-2023
Velammal Engineering College Chennai	AssistantProfessor	02-01-2007	04-03-2011
Saveetha Engineering College, Chennai	AssistantProfessor	07-07-2005	31-12-2006

Awards:

- First Prize in Chief Minister Award for Excellence in E-Governance in 2015.

Additional / Academic Responsibilities at University:

- National Service Scheme Programming Officer at UCE, BIT Campus from August 2024.
- Anti-Drug committee Member at UCE, BIT Campus from Sep 2024.
- Department NBA Coordinator at UCE, BIT Campus from Sep 2024.
- Placement Officer at UCE, Ariyalur Campus from Jan 2012 to July 2023.
- Zonal Officer for Zone 12 from 30th Nov 2021 to 31st July 2023.
- Network and System Coordinator at UCE, Ariyalur Campus from Nov 2020 to July 2023.
- TFC-53 Coordinator for TNEA Engineering Admissions 2022-2023.
- Core Committee Member appointed by honorable Vice chancellor of Anna University Chennai – Staff, Students Grievances and Purchase – UCE Ariyalur till 13-07-2023.
- Class In charge at UCE, Ariyalur Campus from Jan 2012 to July 2023.
- Website Design Coordinator (auucea.edu.in) at UCE, Ariyalur Campus from Mar 2016 to July 13-07-2023.
- Industrial Visit Coordinator at UCE, Ariyalur Campus from Jan 2013 - Jan 2016.

Research Guidance:

Ph.D. Scholars Guided	Ph.D. Scholars Thesis Submitted	No. of Ph.D. Scholars on Going
06	-	04

List of Research Scholars who have completed their Ph.D. / M.S (By Research):

SL.NO	DEGREE	REG.NO	NAME	TITLE OF THE THESIS	VIVA DATE
1	Ph.D	20114022015	Ramachandran A	A Content Retrieval System Using Semantic Based Preprocessing, Clustering and Classification Techniques.	04.11.2020
2	Ph.D	1522459609	Mithila T	Evaluation Of Automated Text Detection and Recognition Approach for Natural Scene Images.	06.10.2022
3	Ph.D	1424459923	Nalayini P	Evaluation Of Metaheuristic Optimization Based Data Aggregation Scheme for Fog Enabled IOT Environment.	10.07.2023
4	Ph.D	19134597137	Selvakumar P	Performance Analysis of AMD Classifications Using Optimization Based Deep Learning Methods.	12.07.2024
5.	Ph.D	20234591128	Suganthi.M	An Offline English Optical Character Recognition and Ner Using LSTM and Adaptive Neurofuzzy Inference System.	18.10.2024
6.	Ph.D	19144597211	Raja R	Improving Security in IOT Based Cloud Computing Through the Integration of Blockchain Technology And Hybrid Cryptography.	28.10.2024

Patent List:

Sl.No	Patented Title	Field of Invention	Date
01.	Intelligent Cyber Security Platform with Anomaly Detection Capabilities.	Computer Science	06-09-2024
02.	IOT Based Ferrous and Nonferrous Waste Sorting Machine	Computer Science	27-08-2024

Professional Activities:

- Resource person for AICTE sponsored ATAL FDP on Machine Learning Techniques and its Real Time Applications and deliver a lecture on "Bayesian Network and SVM" on 16.10.2024 at K.Ramakrishnan College of Engineering, Trichy .
- Resource person for Student Induction Program on 23.09.2024 at MAM School of Engineering Trichy and deliver a lecture on “Digital Empowerment: Navigating Skills, Security, and Citizenship in the Modern World”.

- Resource person for Student Induction Program on 05.09.2024 at University College of Engineering Ariyalur and deliver a lecture on “Computer Literacy and its applications”.
- Acted as Session Chair in the 2024 Third IEEE Sponsored International Conference on Electrical, Electronics, Information and Communication Technologies (IEEE ICEEICT 2024) held at K. Ramakrishnan College of Engineering, Tiruchirappalli, Tamil Nadu, India during 24 - 26, July 2024. The conference has been technically Co-Sponsored by IEEE Madras section.
- Jury Member for UMACINE CHENNAI TECH SHOWCASE 23 NAN MUDHALVAN PROJECT Conducted at Saranathan Engineering College Trichy.
- Delivered a Talk on “Image Processing and its applications” in Meenakshi Ramaswamy Engineering College on 31-05-2022.
- Keynote Address Speaker at Institution of Engineers (India), Tiruchirappalli Local Centre about “Machine Learning and its Perspective” under Computer Engineering on 19/10/2021.
- Invited Talk in Two Days Workshop on Academic Research Writing and High-Quality Journal Publication on “Introduction to Journal and Author Metrics” Organized by IQAC of Nandha Engineering College Erode on Sep 27 2021.
- Guest Lecture on “Machine Learning a Probabilistic Perspective “at MAM School Of Engineering, Trichy on 06 Jul 2020.
- Mentor For 4 Teams During The 100 Day Long Covid 19 National Bioinformatics Online Hackathon.
- Keynote Address Speaker for National Conference on Recent Trends in Computer fields –BWDA Arts and Science College on 9th Jan 2020.
- Handled the Motivational Talk and Recent trends in Computer fields for CSE Students of SRM Valliammai Engineering College, Chennai on Dec 19,2019.
- Guest lecture on “Machine Learning and its applications” at Rover Engineering college, Perambalur on October 28, 2019.
- Acted as Jury member in International Conference at University College of Engineering, Panruti on November 29 ,2018.
- Guest lecture on ‘Recent Developments in Machine Learning Process for Screening and Diagnosis of Autism using Rapid Miner’ for Indian Council of Medical Research (ICMR) at V.R.S Engineering College, Villupuram on 6th May 2016.
- Keynote Address Speaker for National Conference on Emerging trends in M-Commerce in University College of Engineering - Panruti on 21st Nov 2015.
- Keynote Address Speaker for National Conference on Cryptographic and Network Security in Easwari Engineering College Chennai on 28th Mar 2015.
- Coordinator for Titan Employability Skill Training Program collaboration with Mahindra Pride School in University College of Engineering Ariyalur from Feb 2015 onwards.

Membership of Scientific and Professional Societies:

- Annual Membership in ISTE
- Annual Membership in IET

My You Tube Channel to Spread the Knowledge:

- <https://www.youtube.com/channel/UC3Ixe9cBQ1n3krQ0iharkcA> (Channel name: @drarunprakashr9424)

List of Seminar / Short Term Course /FDP/ Workshop Organized / Attended:

- Effective Teaching /Learning of Computer Programming Conducted by Indian Institute of Technology – Bombay from 14th to 24th Dec 2009. (11 Days).
- Open-Source Tools and Components and Open-Source Software-Organized by CSI College of Engineering from 13th to 14th Dec 2012(2 days).
- Developing Pedagogical skills for through Active Learning Techniques –organized by MAM College of Engineering from 10th to 22nd June 2013(13 days).
- Research Methodologies of Information and Communication Engineering organized by Meenakshi Ramaswamy Engineering College from 12th to 22nd June 2014(11 Days).
- Organized a Program Science and Technology Capacity Building for Industrial Needs Sponsored by Tamil Nadu State Council for Science and Technology in University College of Engineering -Ariyalur From 07th July to 9th July 2014. (Sponsor amount One Lakh).
- Networking and Troubleshooting organized by University College of Engineering- Ariyalur from 29th Sep to 1st Oct 2014(3 Days).
- Advance Web Development –PHP & MYSQL organized by Dhanalakshmi Srinivasan Engineering College from 23rd to 24th July 2015(2 days).
- One Week Faculty Development Program on Multicore Architecture Sponsored by Centre for faculty development Anna University Chennai in University College of Engineering Panruti from 23rd to 29th Nov 2016.
- Transforms and Partial Differential Equation sponsored by centre for faculty development Anna University Chennai in University College of Engineering Ariyalur from 25th to 31st May 2017.
- Foundation Program in ICT for Education conducted by Indian Institute of Technology –Bombay from 03rd Aug to 07th Sep 2017(14 Days).
- Pedagogy for Online and Blended Teaching –Learning Process conducted by Indian Institute of Technology –Bombay from 14th Sep to 12th Oct 2017(14 Days).
- Effective use of IT for professional activities conducted by Indian Institute of Technology –Bombay from 4th Sep to 11th Nov 2018.
- Two-week Faculty Development Training Program on Compiler Design sponsored by Centre for faculty development Anna University Chennai in University College of Engineering BIT Campus, Trichy from 3rd to 15th Dec 2018.

- Soft Skills on Online Course under the College Corporate programme conducted by Indian Institute of Technology – Bombay from 6th Sep to 4th Oct 2018.
- Workplace Communication on online course under the college corporate programme conducted by Indian Institute of Technology – Bombay from 4th Oct to 12th Nov 2018.
- Coordinator for a Program” Science and Technology Capacity Building for Industrial Needs “Sponsored by Tamil Nadu State Council for Science and Technology and Government of Tamilnadu in University College of Engineering - Ariyalur From 6th Feb to 9th Feb 2019. (Sponsor amount One Lakh).
- Financial Literacy on online course under the college corporate programme conducted by Indian Institute of Technology – Bombay from 19th Feb to 18th Mar 2019.
- English for Oral Communication on online course under the college corporate programme conducted by Indian Institute of Technology – Bombay from 19th Feb to 17th Apr 2019.
- Handling Large Projects on online course under the college corporate programme conducted by Indian Institute of Technology – Bombay from 26th Mar to 22nd Apr 2019.
- One day Workshop on “Analog Discovery Kit” Conducted by Department of ECE, University College of Engineering –BIT Campus, Trichy on 7th June 2019.
- Fundamentals of 3D Visualization on online course under the college corporate programme conducted by Indian Institute of Technology –Bombay from 19th Sep to 4th Oct 2019.
- Basic 3D Modeling using Blender on online course under the college corporate programme conducted by Indian Institute of Technology –Bombay from 19th Sep to 4th Oct 2019.
- Basic 3D Animation Using Blender on online course under the college corporate programme conducted by Indian Institute of Technology –Bombay from 19th Sep to 23rd Dec 2019.
- Three Weeks Industrial Training On “Communication and Networking Technologies in Bharat Sanchar Nigam Limited During 08th June to 26th June 2020.
- Two-week Online Faculty Development Training Program on “Advanced Optimization Techniques and hands-on with MATLAB/SCILAB” Organized by Electronics and ICT Academies-by the Ministry of Electronics and Information Technology, Government of India during 13th July to 24th July 2020.
- Two-week Online Faculty Development Training Program on Data Science for ALL Organized by Electronics and ICT Academies-NIT Warangal, IITDM Jabalpur and NIT Patna during 27th July to 8th August 2020.
- One-week Online Faculty Development Training Program on Inculcating Universal Human Values in Technical Values organized by AICTE from 28th Feb to 4th March 2022.
- Participated in Nan Mudhalvan Training of Trainers Program for Augmented Reality, Virtual Reality & Metaverse Development.
- Twelve Weeks NPTEL Online Certification on “Introduction to Internet of Things” Conducted by IIT Kharagpur from July to October 2023.

- Completed “8 Module “Course in National Initiative for Technical Teachers Training in February 2024.
- Organized one day All India Seminar on “Fog Computing Using Industry 5.0” collaboration with Institution of Engineers (India), Tiruchirappalli Local Centre under the aegis of Computer Engineering Division Board on 23rd August 2024.
- Coordinator for the one-day international workshop on “FORTIFYING YOUNG MINDS” for Quality of Life through Indigenous Yoga and its Practices on 28 Sep.2024 held at UCE BIT Campus Tiruchirappalli.

International Conferences Participated:

- Attended and Delivered an Oral Presentation International Conference on Machine Learning and Computing (ICMLC 2011) in Singapore during Feb 26 to Feb 28, 2011.

Publications:

Books:

- **Programming in C** Published by Sri Seyon Publication-Chennai 2018(**ISBN NO: 978-81-936779-1-9**).
- **Foundations of Data Science** Published by Cosmas Scientific Publication 2024 (**ISBN NO:978-93-6096-390-3**).

International Conferences:

- Presented a paper on Pin Distribution Techniques in M-Commerce System in International Conference on Machine Learning and Computing (ICMLC 2011) in Singapore during Feb 26 to Feb 28, 2011.
- Presented a paper on IOT Device and Applications Based on Lorawan in International Conference on Engineering and Technology (ICET 2020) Organized by the Institution of Engineers (India), Salem Local Centre and International Journal of New Innovation in Engineering and Technology (IJNIET). In Namakkal during 4th March and 5th March 2020.

National Conferences:

- Presented a paper on Biometric Authentication in M-commerce System in Meenakshi Ramaswamy Engineering College Thathanur-09th Feb 2015.
- Presented a paper on Improved Pin Distribution Techniques in M-Commerce System in Velammal Engineering College -11th March 2011.

International Journals:

- **R.ArunPrakash**, Mehata.K.M, Chellappan.C “A Novel Hybrid Authentication Method Based on Orientation Maps and Server Aided Signature for M-Commerce Secured Transactions “Journal of Theoretical & Applied Information Technology. Vol. 64 Issue 1, p84-94. 11p.Oct 2014. ISSN: 1992- 8645.
- K.Shanmugam, Dr.B.vanathi, R.Arunprakash “Secured M-commerce Transactions using mixed Fingerprint Authentications” International Journal of Engineering Development and Research, ISSN:2321-9939, Vol.3, Issue 2, pp., Apr-2014.
- R. ArunPrakash, Mehata.K. M, Chellappan.C “A Robust Biometric Authentication and Pin Distribution Technique for Secure Mobile commerce Applications “Research Journal of Applied Sciences, Engineering and Technology 9(6): 409-418, DOI: [10.19026/rjaset.9.1420](https://doi.org/10.19026/rjaset.9.1420), ISSN: 2040-7459; e-ISSN: 2040-7467 ,Nov 2015.
- **R.ArunPrakash**,W. R. Salem Jeyaseelan and T. Jayasankar “Detection, Prevention and Mitigation of Wormhole Attack in Wireless Adhoc Network by Coordinator” DOI: [10.18576/amis/120123](https://doi.org/10.18576/amis/120123),Appl. Math. Inf. Sci. 12, No. 1, 233-237 Jan 2018.
- **R.ArunPrakash**, T. Jayasankar and K. Vinothkumar” Biometric Encoding and Biometric Authentication (beba) Protocol for Secure Cloud in M-Commerce Environment” DOI: [10.18576/amis/120126](https://doi.org/10.18576/amis/120126),Appl. Math. Inf. Sci. 12, No. 1, 255-263 Jan 2018.
- R. ArunPrakash, R.J.Kavitha, and N.Thammarai kannan. “Energy efficient hybrid optimization based K-means clustering and load balancing using optimized Ad-hoc on demand distance vector routing for WSN” DOI: [10.35940/ijitee.i7821.078919](https://doi.org/10.35940/ijitee.i7821.078919),IJITEE ISSN NO:2278-3075, vol-8; issue-9, July 2019.
- R. ArunPrakash, K.M.Anandkumar and A.Ramachandran. “” New Wireless multifunctional smart robot for border security surveillance with real time objects recognition” International Journal of Recent Technology and Engineering, DOI: [10.35940/ijrte.c5432.098319](https://doi.org/10.35940/ijrte.c5432.098319), ISSN no: 2277-3878, vol-8, issue-3, Sep 2019.
- R. ArunPrakash, K.M.Anandkumar and D.Amirtha Sughi ”Cloud-based Smart Grid Architecture for Secured Big Data Information Management” DOI: [10.35940/ijitee.b7808.129219](https://doi.org/10.35940/ijitee.b7808.129219),IJITEE,ISSN:2278-3075,Volume-9 Issue-2,Dec 2019.
- R. ArunPrakash, K.M.Anandkumar and P.Harikumar “A Design of a Patient-Customized Healthcare System for Learning Blood Circulation System(I-Lbcs) by Game-Learning Environment(G-Le)”International Journal of Innovative Technology and Exploring Enginerring, DOI: [10.35940/ijitee.b6712.129219](https://doi.org/10.35940/ijitee.b6712.129219), ISSN:2278-3075, Volume-9 Issue-2, Dec 2019.
- R. ArunPrakash “Intelligent Heart Disease Detection and Classification Method Using Optimal Neuro-Fuzzy with Stochastic Gradient Descent Model for Smart Societies Artificial Intelligence Applications for Smart Societies” DOI: [10.1007/978-3-030-63068-3_12](https://doi.org/10.1007/978-3-030-63068-3_12), Springer Book Chapter, Apr 2021. ISBN978-3-030-63067-6.
- **R. Arunprakash**, Ramachandran Alagarsamy, Sannasi Ganapathy, Aghila Rajagopal and R.J. Kavitha co-authors of the titled research paper “A fuzzy content recommendation system using similarity analysis, content ranking and clustering” published in the Journal of “Journal of Intelligent & Fuzzy Systems 41, (2021) 6429–6441, DOI: <https://doi.org/10.3233/JIFS-210246>. ISSN 1064-1246

- T.Mithilla, **R.ArunPrakash**, A.Ramachandran “CNN and Fuzzy Rules Based Text Detection and Recognition from Natural Scenes” published in the Computer Systems Science and Engineering, vol. 42, no.3, pp. 1165–1179, 2022, DOI: <https://doi.org/10.32604/csse.2022.023308> . DOI:10.32604/csse.2022.023308
- P. Nalayini, **R. ArunPrakash** “Hierarchical Data Aggregation with Data Offloading Scheme for Fog Enabled IoT Environment” *Computer Systems Science and Engineering* 2023, 44(3), 2033-2047. <https://doi.org/10.32604/csse.2023.028269> DOI:10.32604/csse.2023.028269
- Selvakumar, P, **ArunPrakash, R** “An Efficient Investigation on Age-Related Macular Degeneration Using Deep Learning with Cloud-Based Teleophthalmology Architecture” Journal of Biomaterials and Tissue Engineering, Volume 13, Number 4, April 2023, pp. 499-512(14), DOI: <https://doi.org/10.1166/jbt.2023.3288> ISSN: 2157-9083 (Print): EISSN: 2157-9091 (Online)
- M.Suganthi, **R.Arunprakash** “An offline English optical character recognition and NER using LSTM and adaptive neuro-fuzzy inference system” Journal of Intelligent & Fuzzy Systems 44 (3), 3877-3890 April 2023 DOI: 10.3233/JIFS-221486 ISSN 1064-1246 (P) ISSN 1875-8967 (E).
- Raja RAMAMOORTHY, **Arunprakash RAMASAMY** “Block Chain Technology Assisted Privacy Preserving Resource Allocation Scheme for Internet of Things Based Cloud Computing” Tehnički vjesnik 30, 6(2023), 1943-1950, <https://doi.org/10.17559/TV-20230404000503>,ISSN 1330-3651 (Print), ISSN 1848-6339 (Online)
- M. Anandha Kumar, M. Shanmuga Priya and **R. Arunprakash** “An early discovery of intrusion attack using novel optimized deep learning for internet of things” Journal of Intelligent & Fuzzy Systems 46 (2024) 5455–5463 DOI:10.3233/JIFS-221351, ISSN 1064-1246

DECLARATION:

I CERTIFY THAT THE INFORMATION FURNISHED ABOVE IS CORRECT TO THE BEST OF KNOWLEDGE AND BELIEF.

DATE:

Signature With date