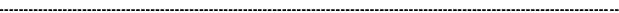
### Dr R.ArunPrakash

Assistant Professor Sr Grade
Department of Computer Science and Engineering
University College of Engineering BIT Campus
Tiruchirappalli

Contact no: 9865483667

Mail. ID: arunitvijay@yahoo.com Scopus Author ID: 57200271787 Orcid ID: 0000-0003-4351-1006





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	2008-2016	
M.Tech	Information Technology	Sathyabama University	2003-2005	First Class with Distinction
B.Tech	Information Technology	Bharathidasan University	1999-2003	First Class

### **Experiences:**

Name of the Institutions	Designation of Post	From	То
University College of Engineering BIT Campus Tiruchirappalli	Assistant Professor (Sr Grade)	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:

- ➤ Placement Coordinator from Jan 2012 to July 2023.
- ➤ Network and System Coordinator from Nov 2020 to July 2023.
- ➤ Zonal Officer for Zone 12 from 30<sup>th</sup> Nov 2021 to 31<sup>st</sup> July 2023.
- ➤ TFC Coordinator for TNEA Engineering Admissions 2022-2023.
- ➤ Core Committee Member Staff, Students Grievances and Purchase UCE Ariyalur till 13-07-2023.
- Class In charge from Jan 2012 to July 2023.
- Website Design Coordinator (auucea.edu.in ) Mar 2016 to July 13-07-2023.
- ➤ Industrial Visit Coordinator During Jan 2013 Jan 2016.

# 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	04.11.2020
				SYSTEM USING SEMANTIC	
				BASED PREPROCESSING,	
				CLUSTERING AND	
				CLASSIFICATION	
				TECHNIQUES	
2	Ph.D	1522459609	Mithila T	EVALUATION OF	06.10.2022
				AUTOMATED TEXT	
				DETECTION AND	
				RECOGNITION APPROACH	
				FOR NATURAL SCENE	
				IMAGES	
3	Ph.D	1424459923	Nalayini P	EVALUATION OF	10.07.2023
				METAHEURISTIC	
				OPTIMIZATION BASED DATA	
				AGGREGATION SCHEME FOR	
				FOG ENABLED IOT	
				ENVIRONMENT	
4	Ph.D	19134597137	Selvakumar P	PERFORMANCE ANALYSIS	12.07.2024
				OF AMD CLASSIFICATIONS	
				USING OPTIMIZATION	
				BASED DEEP LEARNING	
				METHODS	

#### **Professional Activities:**

- ➤ Jury Member for UMAGINE CHENNAI TECH SHOWCASE 23 NAN MUDHALVAN PROJECT.
- ➤ Delivered a Talk on Image Processing 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 19national Bioinformatics Online Hackathon.
- ➤ Keynote Address Speaker for National Conference on Recent Trends in Computer fields –BWDA Arts and Science College on 9<sup>th</sup> 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 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 6<sup>th</sup> 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 IEI

#### My You Tube Channel to Spread the Knowledge:

https://www.youtube.com/channel/UC3Ixe9cBQ1n3krQ0iharkcA (Channel name: Dr Arunprakash R).

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

- ➤ Effective Teaching /Learning of Computer Programming Conducted by Indian Institute of Technology

   Bombay From 14<sup>th</sup> to 24<sup>th</sup> Dec 2009. (11 Days).
- ➤ Open-Source Tools and Components and Open-Source Software-Organized by CSI College of Engineering from 13<sup>th</sup> to 14<sup>th</sup> Dec 2012(2 days).
- ➤ Developing Pedagogical skills for through Active Learning Techniques –organized by MAM College of Engineering from 10<sup>th</sup> to 22<sup>th</sup> June 2013(13 days).
- ➤ Research Methodologies of Information and Communication Engineering organized by Meenakshi Ramaswamy Engineering College from 12<sup>a</sup> to 22<sup>a</sup> June 2014(11 Days).
- Organized a Program Science and Technology Capacity Building for Industrial Needs Sponsored by Tamilnadu 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 29<sup>th</sup> Sep to 1<sup>th</sup> Oct 2014(3 Days).
- Advance Web Development –PHP & MYSQL organized by Dhanalakshmi Srinivasan Engineering College from 23<sup>rd</sup> to 24<sup>rd</sup> 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 23<sup>rd</sup> to 29<sup>th</sup> Nov 2016.
- ➤ Transforms and Partial Differential Equation sponsored by centre for faculty development Anna University Chennai in University College of Engineering Ariyalur from 25<sup>th</sup> to 31<sup>st</sup> May 2017.
- ➤ Foundation Program in ICT for Education conducted by Indian Institute of Technology –Bombay from 03<sup>rd</sup> Aug to 07<sup>th</sup> Sep 2017(14 Days).
- ➤ Pedagogy for Online and Blended Teaching –Learning Process conducted by Indian Institute of Technology –Bombay from 14<sup>th</sup> Sep to 12<sup>th</sup> Oct 2017(14 Days).
- ➤ Effective use of IT for professional activities conducted by Indian Institute of Technology –Bombay from 4<sup>th</sup> Sep to 11<sup>th</sup> 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 3<sup>rd</sup> to 15<sup>th</sup> Dec 2018.

- ➤ Soft Skills on Online Course under the College Corporate programme conducted by Indian Institute of Technology Bombay from 6<sup>th</sup> Sep to 4<sup>th</sup> Oct 2018.
- ➤ Workplace Communication on online course under the college corporate programme conducted by Indian Institute of Technology Bombay from 4<sup>th</sup> Oct to 12<sup>th</sup> Nov 2018.
- ➤ Coordinator for a Program" Science and Technology Capacity Building for Industrial Needs "Sponsored by Tamilnadu State Council for Science and Technology and Government of Tamilnadu in University College of Engineering Ariyalur From 6<sup>th</sup> Feb to 9<sup>th</sup> Feb 2019. (Sponsor amount One Lakh)
- ➤ Financial Literacy on online course under the college corporate programme conducted by Indian Institute of Technology Bombay from 19<sup>th</sup> Feb to 18<sup>th</sup> Mar 2019.
- ➤ English for Oral Communication on online course under the college corporate programme conducted by Indian Institute of Technology Bombay from 19<sup>th</sup> Feb to 17<sup>th</sup> Apr 2019.
- ➤ Handling Large Projects on online course under the college corporate programme conducted by Indian Institute of Technology Bombay from 26<sup>th</sup> Mar to 22<sup>nd</sup> Apr 2019.
- ➤ One day Workshop on "Analog Discovery Kit" Conducted by Department of ECE, UniversityCollege of Engineering –BIT Campus, Trichy on 7<sup>th</sup> June 2019.
- ➤ Fundamentals of 3D Visualization on online course under the college corporate programme conducted by Indian Institute of Technology –Bombay from 19<sup>th</sup> Sep to 4<sup>th</sup> Oct 2019.
- ➤ Basic 3D Modeling using Blender on online course under the college corporate programme conducted by Indian Institute of Technology –Bombay from 19<sup>th</sup> Sep to 4<sup>th</sup> Oct 2019.
- ➤ Basic 3D Animation Using Blender on online course under the college corporate programme conducted by Indian Institute of Technology –Bombay from 19<sup>th</sup> Sep to 23<sup>rd</sup> Dec 2019.
- ➤ Three Weeks Industrial Training On "Communication and Networking Technologies in Bharat Sanchar Nigam Limited During 08<sup>th</sup> June to 26<sup>th</sup> 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 13<sup>th</sup> July to 24<sup>th</sup> 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 27<sup>th</sup> July to 8<sup>th</sup> August 2020.
- ➤ One-week Online Faculty Development Training Program on Inculcating Universal Human Values in Technical Values organized by AICTE from 28<sup>th</sup> Feb to 4<sup>th</sup> March 2022.
- ➤ Participated in Nan Mudhalvan Training of Trainers Program for Augmented Reality, Virtual Reality & Metaverse Development held between 19<sup>th</sup> to 30<sup>th</sup> September 2022.
- > Twelve Weeks NPTEL Online Certification on "Introduction to Internet of Things" Conducted by IIT Kharagpur from July to October 2023.

#### **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 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.
- ➤ 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: <a href="https://doi.org/10.19026/rjaset.9.1420">10.19026/rjaset.9.1420</a>, 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, Appl. Math. Inf. Sci. 12, No. 1, 233-237 Jan 2018.
- R.ArunPrakash1, T. Jayasankar and K. Vinothkumar" Biometric Encoding and Biometric Authentication (beba) Protocol for Secure Cloud in M-Commerce Environment" DOI: 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,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 recognisation" International Journal of Recent Technology and Engineering, DOI: <a href="https://doi.org/10.35940/ijrte.c5432.098319">10.35940/ijrte.c5432.098319</a>, 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: <u>10.35940/ijitee.b7808.129219</u>,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 Engineering, DOI: 10.35940/ijitee.b6712.129219, ISSN:2278-3075, Volume-9 Issue-2, Dec 2019.
- Ramachandran, R.Arunpraksh, Aghila Rajagopal, Manju Khari "Efficient Distributed Web Crawler Using Hefty and Enhanced Bandwidth Algorithms for Drug Website Search" DOI: https://doi.org/10.30991/IJMLNCE.2020v04i01.001, ISSN: 2581-3242, Vol. 04, No. 01, (2020), 001–011.
- ➤ R. ArunPrakash "Intelligent Heart Disease Detection and Classification Method Using Optimal Neuro-Fuzzy with Stochastic Gradient Descent Model for Smart SocietiesArtificial Intelligence Applications for Smart Societies" DOI: 10.1007/978-3-030-63068-3\_12, Springer Book Chapter, Apr 2021.
- ➤ R. Arunprakash, Ramachandran Alagarsamy, Sannasi Ganapathy, Aghila Rajagopal and R.J. Kavitha coauthors 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.
- ➤ 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: <a href="https://doi.org/10.32604/csse.2022.023308">https://doi.org/10.32604/csse.2022.023308</a>.
- ➤ 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
- ➤ 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
- ➤ 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

#### **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 4<sup>th</sup> March and 5<sup>th</sup> 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 -11<sup>th</sup> March2011.

# **DECLARATION:**

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

DATE: Signature With date