



Dr.K.SIVAKUMAR, M.E., Ph.D.,

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Administrative Positions

Deputy - Head of the Department

June 2014 - Dec 2021 JCT College of Engineering and Technology, Coimbatore



Employment

Total Teaching Experience in Engineering Colleges: 17 Years

July 2022	- Till Date	Associate Professor Nehru Institute of Technology, Coimbatore Tamil Nadu
June 2012	- Dec 2021	Associate Professor JCT College of Engineering and Technology, Coimbatore Tamil Nadu
July 2009	- Apr 2012	Assistant Professor A.M.S Engineering College, Namakkal Tamil Nadu
June 2004	- Aug 2007	Lecturer A.M.S Engineering College, Namakkal Tamil Nadu



Education

2016	- 2020	Ph.D. Computer Science and Engineering (ICE) Part-time - Anna University, Chennai Tamil Nadu, India	Awarded
2007	- 2009	M.E. Computer Science and Engineering A.M.S Engineering College Anna University Coimbatore	First Class CGPA: 7.20
2000	- 2004	B.E. Computer Science and Engineering Sri Ramakrishna Engineering College Bharathiar University, Coimbatore	First Class 62.5 %



Achievements

1. AWARD

- Professional Awards and Honors Convocation- 2018, Coimbatore, **“Innovative Technologist & Dedicated Teaching Professional Award”** Organized by Innovative Scientific Research Professional Malaysia, 25th March 2018.
- IJMTST Research Excellence Awards 2020, **“Young Research Award 2020”** Organized by International Journal for Modern Trends in Science and Technology.

2. PATENTS

- **Artificial Intelligence Based Cyber Security Intrusion Detection Threats**, Patent office-India, Patent No. 202341025048 A, published on 05.05.2023.
- **An Automated Food Freshness Detection Using Feature Deep Learning**, Patent office-Australia, Patent No. 2020100953, Published on 01.07.2020
- **An Automated and Adaptive Self-Power Generate Garbage Notification System**, Patent office-India, Application No.201911004222A, Published on 22.02.2019
- **An Apparatus of Internet of Things Personal Wearable Tracking System With Method of AI**, Patent office-India, Patent No. 20194133959 A, Published on 20.09.2019

3. BOOK & BOOK CHAPTER

- **Cyber Forensics** (ISBN: 978-93-5625-493-0, Publisher: Scientific International Publishing House)
- **Artificial Neural Network for Skin Cancer using Machine Learning Techniques** (ISBN: 978-93-86923-47-9, Publisher: Dipti Press OPC Pvt. Ltd)



Publications in International Journals

1. K. Sivakumar, “A Personalized Medical Decision Making System for Chronic Kidney Diseases Using Multi-Class Fuzzified ADAM Optimization”, Journal of Concurrency and Computation: Practice and Experience (Submitted on oct 2022)
2. K. Sivakumar, “Big Data Evaluation in Health Care Analytics Using Extreme Machine Learning Based on Map Reduce”, International Journal of Engineering and Advanced Technology, Vol. 9, No. 3, pp. 2758-2762 Feb 2020.
3. K. Sivakumar, “Phenotype Algorithm Based Big Data Analytics for Cancer Diagnose”, Journal of Medical Systems (SCI & WoS), Vol. 43 - No. 8, pp. 264-278 Aug 2019.
4. K. Sivakumar, “Steganography Technique Based on WPT and Elgamal Encryption with Confusion for Robust Medical Image”, International Journal of Recent Technology and Engineering, Vol. 8 - No. 2S11, pp. 2239-2248 Sep 2019.
5. K. Sivakumar, “Review On-Exploring the limitations and Challenges of large Scale Cloud Computing”, International Journal of Engineering Research and Technology, Vol. 6, No. 8 April 2018.

6. K. Sivakumar, "Enhancing the Security of the Cloud Computing with Triple AES, PGP over SSL Algorithms", International Journal of Engineering Sciences and Research Technology, Vol. 7, No. 8, pp.75-82 Feb 2018.
7. K. Sivakumar, "Distributed System Framework for Mobile Cloud Computing", Bonfring International Journal of Research in Communication Engineering, Vol. 7, No. 1, pp.05-09 Feb 2018.
8. K. Sivakumar, "Enhancing the Security of Caesar Cipher Substitution Method using a transposition technique for more Secure Communication", International Journal of Computer Science and Engineering Technology, Vol. 8, No. 10, pp.348-353 Oct 2017.
9. K. Sivakumar, "Efficient Cloud Computing with Secure Data Storage Using AES and PGP Algorithm", International Journal of Computer Science and Information Technologies, Vol. 8, No. 6, pp.582-585 Jun 2017.
10. K. Sivakumar, "Native Hadoop Based Enhanced Cloud Architecture in Bio Medical Industry", International Journal of Advance Research in Science and Engineering, Vol. 6, No. 1, pp.441-448 Dec 2017.
11. K. Sivakumar, "A Hierarchical Fuzzy Relational Clustering algorithm for Sentence Level Text Clustering", International Journal of Engineering Research and Sports Science, Vol. 3, No. 8 Apr 2016.
12. K. Sivakumar, "Trusted Cloud Computing Methods using to Protected File Encryption Performance", International Journal of Scientific Engineering and Applied Science, Vol. 2, No. 3, pp.52-59 March 2017.
13. K. Sivakumar, "LBMPSO Algorithm for Balancing the Load in Grid Environment", International Journal of Engineering and Technology, Vol. 4, No. 11, pp.01-06 June 2016.



Presentation in International Conference

1. Presented paper titled "IOT Based Automatic Vehicle Accident Detection and Rescue System", in AICTE Sponsored International Conference on ICCTCHIT 10 December 2020.
2. Presented paper titled "Hybrid Apriori-KNN Based Smart Irrigation System", in IECICN on July 2020.
3. Presented paper titled "Big Data Evaluation in Health Care Analytics Using Extreme Machine Learning Based on Map Reduce, in Springer International Conference on ICSCS 27 July 2019.
4. Presented paper titled "Steganography Technique Based on WPT and ElGamal Encryption with Confusion for Robust Medical Image, in Springer International Conference on ICSCS 26 July 2019.
5. Presented paper titled "Big Data Processing Using the Native Hadoop", in ICICNRES on March 2018.
6. Presented paper titled "Native Hadoop Based Enhanced Cloud Architecture in biomedical Industry", in ICASES on December 2017.

7. Presented paper titled “Distributed System Framework for Mobile Cloud Computing”, in ICRAET on December 2017.
8. Presented paper titled “BACO Algorithm for scheduling job in grid environment”, in ICGICCS on March 2016.
9. Presented paper titled “Heuristic based ANT colony and optimal algorithm for load balancing grid scheduling environment”, in ICEEICA on March 2016.
10. Presented paper titled “Defending DDOS with SOA and forensic analysis”, in ICGICCS on March 2016.



Presentation in National Conference

1. Presented paper titled “LBMP SO Algorithm for Balancing the Load in Grid Environment”, in Kongunadu College of Engineering & Technology on March 2016.
2. Presented a paper titled [Efficient Cryptography Key Management Process In Mission- Critical Wireless Networks] in the National Conference on [Computing Techniques], Organized by [Dept.of CSE, Mahendra Engg.College, Tiruchengode on March 17 2011]
3. Presented paper titled “Stop and wait ARQ for parallel multichannel communications”, at Sri Muthukuaran Institute of Technology on Feb 12 2010.
4. Presented a paper titled [Modeling Image Data for Effective Indexing and Retrieval in Large General Image Database] in the National Conference on [Advanced Computing & Communications], Organized by [Dept.of CSE, PGP Engg.College, Namakkal on April 7 2010].



Institution and Department-Level Responsibilities

- » Department **Academic Coordinator** from 18.12.2017 to 30.05.2021
- » Department **NBA & NAAC Coordinator** from 02.06.2017 to 30.05.2021
- » Department **Project Coordinator** from 01.06.2017 to 30.11.2017
- » Class Advisor & Lab In-charge from 01.06.2014 to 30.12.2019
- » Department **Internal Test Coordinator** from 01.06.2012 to 30.05.2016
- » Department **Association Coordinator** from 01.06.2016 to 30.05.2021
- » **Computer Society of India (CSI) – Student Branch Institutional Membership coordinator** from 01.07.2016 to 30.05.2021
- » **NPTEL : IIT-Madras Local Chapter Institutional Membership Coordinator (SPOC)** from 01.06.2016 to 30.05.2021
- » **National Cyber Safety and Security Standards (NCSSS) Institutional Membership Coordinator** from 01.06.2018 to 30.05.2020



MOOC Courses Completed

- » Internet of Things with Elite Grade, NPTEL-IIT Madras
- » Cloud Computing with Elite Grade, NPTEL-IIT Madras
- » Compiler Design, NPTEL-IIT Madras
- » CISCO Certified-Introduction to Cyber Security
- » CISCO Certified- Introduction to Packet Tracer



Participation in External Professional Development Activities

- » Participated in [**NCSSS Sponsored Workshop**] on [**Certified Cyber Security Professional workshop**] conducted at [Anna University, Chennai] during [Feb 24-25, 2018]
- » Participated in [Faculty Development Programme], Sponserd by [**National Institute of Technical Teachers Training and Research, Tamil Nadu**] on [**Outcome Based Education**] conducted at [JCT College of Engineering and Technology, Coimbatore] during [June 04th - 09th, 2018].
- » Participated in [Faculty Development Programme], Sponserd by [**ICT Academy of Tamil Nadu**] on [**Cloud Computing Infrastructures and Services**] conducted at [Nehru Institute of Technology, Coimbatore] during [March 19th & 20th, 2018].
- » Participated in [Short Term Course], Sponserd by [**AICTE-QIP**] on [**Cyber Security and Cyber Forensics**] conducted at [Coimbatore Institute of Technology, Coimbatore] during [November 22 - 28, 2017].
- » Participated in [**CRSI Sponsored Workshop**] on [**Cryptology**] conducted at [Dept. of CSE, National Institute of Technology, Trichy] during [Aug 28, 29 & 30, 2017]
- » Participated in [Two Days Workshop] on [**Python Programming for Industry Strategies**] conducted at [Dept. of IT, **PSG College of Technology, Coimbatore**] during [Nov 04 & 05, 2017]
- » Participated in [Faculty Development Programme], Sponserd by [**Vel Tech Rangarajan Dr.sagunthala R & D Institute of Science and Technology**] on [**Artificial Intelligence, Deep Learning and Computer Vision Applications**] conducted at [Vel Tech University, Chennai] during [Dec 03rd - 09th, 2018].



Membership in Professional bodies

- Life Time Staff Membership in Indian Society for Technical Education (Member Number: LM 71402)
- Computer society of India (Member Number: F8001247)
- International Association of Engineers (Member Number: 167704)
- Society of Innovative Educationalist & Scientific Research Professional
- International Computer Science and Engineering Society (Member Number: 1445)
- International Society for Research and Development (Life Membership Number: M4150905458)



Courses Taught

- » Cryptography and Network Security
- » Computer Networks
- » Designs and Analysis of Algorithms
- » Operating Systems
- » Theory of Computation
- » Data Structures and Algorithms
- » Computer Concepts and C Programming
- » Compiler Design
- » Object Oriented Programming
- » Computer Architecture



External Funding

- » Received Rs.30,000/- from the Anna University Chennai, Government of Tamil Nadu as the Coordinator to organize the Faculty Development Programme on '**Design and Analysis of Algorithms**' in JCT College of Engineering and Technology, Coimbatore.



Other Highlights

- » Reviewer of 2nd IEEE International Conference on Advances in Computing, Communication Control and Networking at Galgotias College of Engineering & Technology, Noida, India.
- » Organized more than 30 In-house Conferences / Seminars / Workshops / Symposiums / Faculty Development Programs.
- » Participated in more than 120 in-Out house FDP / Seminars / Workshops / Symposiums.
- » Reviewer of International Computer Science and Engineering Society (ICSSES)
- » Editorial board member in "Blue Eyes Intelligence Engineering and Sciences Publication".
- » Guided more than 20 UG projects and 5 PG projects.
- » Trained the Non Teaching staff members in Basic Computer Skills.
- » Act as a resource person on 25th Nov 2017 for Anna University Sponsored Faculty development Training Programme on "**Design and Analysis of Algorithms**".



Software Skills

<i>Operating Systems</i>	Windows, Linux
<i>Languages</i>	C, C++, Core Java, Python
<i>Web</i>	HTML, Latex
<i>Database</i>	MS Access, SQL Server 2005, MySQL



Personal Profile

<i>Address</i>	8/8-1, Honey Vilas, Kuniyamuthur, Coimbatore-641008, Tamil Nadu, India
<i>Date of Birth</i>	12-04-1982
<i>Sex</i>	Male
<i>Marital Status</i>	Married and blessed with a two Daughters
<i>Nationality</i>	Indian
<i>Mother Tongue</i>	Tamil
<i>Languages known</i>	English (R,W,S), Tamil (R,W,S)



Professional Identification

- Orcid id: <https://orcid.org/0000-0001-7854-6474>
- Google scholar id:
<https://scholar.google.com/citations?hl=en&user=g2RCfTAAAAAJ>
- Linkedin: <https://www.linkedin.com/in/sivakumar-karuppan-38358866/>



Declaration

I hereby declare that all the details furnished above are true to the best of my knowledge.

Place: Coimbatore

Date: 05.05.2023

K. Kx-m@7.

[Dr.K.SIVAKUMAR]