Dr. K. MAHESWARAN MCA, M. Phil, M. Sc., (Maths), SET, Ph. D

Assistant Professor in Computer Science,

St. Joseph's College (Autonomous),

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Career Objective

To establish myself in the field of Higher education and research, to utilize my skills and experiences to help students career and growth.

Academic Qualification

- **Ph. D** in Computer Science from Bharathidasan University -2019.
- Qualified for State Eligibility Test for Lectureship (SET) 2012 conducted by Bharathiyar University, Coimbatore.
- Master of Science in Mathematics (M. Sc.) from Bharathidasan University, Trichy.
- Master of Philosophy (M. Phil) Computer Science from Jamal Mohamed College (Autonomous), Trichy.
- Master of Computer Applications (MCA) from St. Joseph's College (Autonomous),
 Trichy.
- Bachelor of Science in Mathematics (B.Sc.) from St. Joseph's College (Autonomous), Trichy.

Technical Skill

Programming Skills: C, C++, JAVA, PYTHON, ASP.NET, C#.NET, PHP

Mathematical Skills : Numerical Ability, Operations Research, Probability and

Statistics, Graph Theory, Quantitative Aptitude

Soft Skills: Problem Solving, Time and Stress Management, etc.

Area / Subjects of Interest

- Object-Oriented Programming
- Software Metrics and Cognitive aspects of Programming
- Graph and Automata theory
- .NET Technologies

Workshops / Conferences / Seminars / Training Program Attended

S. No	Name of the Event	Date	Name of the University / College
1.	Workshop on Research Methodology in CS	21 st & 22 nd Dec. 2010	Jamal Mohammed College (Autonomous), Trichy
2.	Orientation Programme for faculty members	10 th and 11 th June 2011	St. Joseph's College (Autonomous), Trichy
3.	Orientation Programme for faculty members SJC	13 th and 14 th June 2011	St. Joseph's College (Autonomous), Trichy
4.	National Conference on Advanced Computing	March 1 st , 2012	Jamal Mohammed College (Autonomous), Trichy
5.	Orientation Programme for Staff	11 th -14 th June 2012	St. Joseph's College (Autonomous), Trichy
6.	Seminar on "Data Management on Cloud Computing Platforms"	1st Aug. 2012	National Institute of Technology, Trichy
7.	Soft Skills Training Programme	August – November 2012	St. Joseph's College (Autonomous), Trichy
8.	Workshop on Smart Devices Programming	8 th Dec. 2012	St. Joseph's College (Autonomous), Trichy
9.	1 st International Conference - WCCCT	27 th Feb. to 1 st March 2014	St. Joseph's College (Autonomous), Trichy
10.	Capacity Building WS on E-content Development between	9 th – 12 th June 2015	St. Joseph's College (Autonomous), Trichy
11.	Workshop on Big data Analytics	4 th & 5 th Jan. 2016	St. Joseph's College (Autonomous), Trichy
12.	National Conference on Higher Education in Knowledge	24 th & 25 th Feb. 2016	St. Joseph's College (Autonomous), Trichy
13.	Faculty Orientation On Value Education	17 th August 2016	St. Joseph's College (Autonomous), Trichy

14.	2 nd International Conference - WCCCT	Feb. 2017	St. Joseph's College (Autonomous), Trichy
15	International Conference on Smart Computing & Communications (ICSCC)	7 th & 8 th Dec. 2017	NIT Kurukshetra, Haryana
16	International Conference on Advances in Computer Science, Engineering and Technology (ICACSET)	19 th & 20 th Jan. 2018	Kalasalingam University, Krishnankoi, Virudhunagar

Papers Presented / Published

- Maheswaran K, "Empirical Validation of CWICC and ICWCC Metrics using Maintenance Effort Estimation Model", Mukt Shabd Journal, Volume IX, Issue XII, December, 2020.
- Maheswaran K, "Theoretical Validation of the Cognitive Complexity Metrics CWICC and CWCC", Proceedings of International Conference on Advances in IoT, High Performance and Edge Computing, Global Technology Forum, ISBN: 978-81-937760-7-0, October, 2020.
- 3. Maheswaran K, Preethijeralinhilda A, "Maintainability Index Computation Based on Cyclomatic Complexity and Halstead Measure for Python", Mukt Shabd Journal, Volume IX, Issue X, October 2020.
- 4. Maheswaran K, Aloysius A, "Empirical Validation Of Object Oriented Cognitive Complexity Metrics Using Maintenance Effort Prediction", International Journal of Scientific Research in Computer Science Applications and Management Studies, Vol. 7, Issue 4, pp. 1-6, 2018.
- Maheswaran K, Aloysius A, "An interface based cognitive weighted class complexity measure for object oriented design", International Journal of Pure and Applied Mathematics, Vol. 118, No. 18 2018, pp. 2771-2778, , 2017.
- 6. Maheswaran K, Aloysius A, "Cognitive Weighted Inherited Class Complexity Metric", Procedia Computer Science, Vol. 125, pp. 297-304, 2017.
- 7. Maheswaran K, Aloysius A, "A Heuristics on Interface Complexity", International Journal of Advanced Research in Computer Engineering & Technology, Vol. 6, pp.1283-1287,2017.

- 8. Maheswaran K, Aloysius A, "An Analysis of Object Oriented Complexity Metrics", International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Vol. 2, pp. 768-775, 2017.
- 9. Gayathri S, Maheswaran K, "A Software Cohesion Metrics-Survey", International Journal of Advanced Engineering and Global Technology, Vol. 5, pp. 1929-1933, 2017.
- 10. Syed Tanzeel Rabani, Maheswaran K "Software Cognitive Complexity Metrics for OO Design: A Survey", International Journal of Scientific Research in Science, Engineering and Technology, Vol. 3, pp. 691-698, 2017.
- 11. Rahul M, Maheswaran K, "Predicting Maintainability with Object-Oriented Metrics An Empirical Comparison", International Journal of Advanced Engineering and Global Technology, Vol. 5, pp.1642-1646, 2017.
- 12. Maheswaran K, Aloysius A, "A Review on Component Based Software Metrics", International Journal of Fuzzy Mathematical Archive Vol. 7, No. 2, pp. 185-194, Jan. 2015.

Acted as a Resource Person

Type of Programme	Title	Beneficiaries	Date
Orientation Programme	Computer Literacy (Chapter: 2: Applications of Computer)	Staff handling Computer Literacy St. Joseph's College	2013-12-06
Soft Skills Training Programme	Resume Writing and Interview skills	III BBA Students St. Joseph's College	2014-02-11
Training / Coaching Program	NET / SET Exam Training in Computer Science	Professors - Organized by ACME Academy, Trichy	2015-07-02
Special Lecture	NET / SET Training in Computer Science	Scholars, Dept. of CS, Alagappa University, Karaikudi	2017-01-06
Special Lecture	Success through Programming	Aimman College for Women, Trichy	2018-08-06
Special Lecture	ASP.NET	B.Sc CS and MCA Students, SJC, Trichy	2019-10-03

Training / Coaching Program	NET Training for Paper-1	Students and Scholars, Dept. of Economics, SJC, Trichy		
Special Lecture	Research Methodology	Holy Cross College, Trichy	2020-01-07	

Academic Post / Position

- Coordinator for the Value Added Course "**Data Analysis using Python**" from February 2021 to Till date.
- President of Computer Science Association, Department of Computer Science, St. Joseph's College (Autonomous), Trichy-620002 between June 2019 to April 2020.
- Acted as a Course Coordinator and organize two courses namely Data Analysis and Numerical Ability, Core Python Programming under DBT –STAR Scheme between November 2019 to February 2020.
- Member of Micro Quality Assurance Cell (MQAC) for Department of Computer Science,
 St. Joseph's College (Autonomous), Trichy-620002 and Worked for getting A++ in NAAC
 4th Cycle of Accreditation between August 2012 to July 2019.
- **Organizing Secretary** of state level technical symposium 'COMTECH 2K16' held on 19th February 2016.
- **Vice President** for Computer Science Association, Department of Computer Science, St. Joseph's College (Autonomous), Trichy-620002 between June 2015 to April 2016.

Awards Received

• Received "International Best Researcher in Computer Science" award by IJRULA in association with World Research Council, USA on January 2020.

Publications of Book (s) / Patent				
Book Title	Publisher	Year		
Computer Literacy (Chapter 2)	St Joseph's College, Trichy	2013		
Fundamentals of Computing and	RK Publication	2022		
Programming	ISBN:978-93-95331-27	2022		

Patent Title: Machine Learning and Image Processing Based Smart Prediction of Human Emotions and Character.

Date of Publication: 13/08/2021.

MOOC Course Completed

• Completed the **NPTEL** online Certification Course, "**Python for Data Science**" during February 2021.

Value Added course Organized

- Acted as Course Coordinator and Completed 7- Batches of Value Added Course "Data Analysis using Python" from February 20
- 21 to April 2023. There are 303 UG and PG Students successfully completed / benefited the course.

Other Details

- o Approved Research Advisor for M.Phil (CS) by Bharathidasan University.
- o Got Qualification Approval from Bharathidasan University.
- o Approved Examiner for UG Theory and Practical exams of Bharathidasan University.
- Acted as a Resource Person in reputed Institutions / Academy for training the students for competitive exams like IIT-JEE, SET/ NET, IBPS, TNPSC, RRB, etc.

Project / Thesis Guided

Under graduate : 45+
Post graduate : 55+

M. Phil : 13 (details given in the following table)

S. No	D. NO	Scholar Name	Title of the thesis	Year of Award
1	13MCS137	Soosai Raj	A Complexity Metric for Component Based Software	September 2014
2	14MCS137	R. Kowsalya	An Interaction Complexity Measure for Component Based Software	September 2015
3	14MCS122	P. Kavitha	An Inheritance Complexity Metric for Object Oriented Code	September 2015
4	14MCS126	R. Ranjani	A Novel Metrics for Calculating Effort in Reusable Component	September 2015

5	15MCS103	A. Raja Prabhu	An Improved Complexity Metrics for Component Based System using Dependency And Interaction	September 2016
6	15MCS108	M. Ragul	Predicting Maintainability of Object Oriented Programming using Class And Hierarchy Level DIT	September 2016
7	15MCS137	J. Balasundari	An Improved Cyclomatic Complexity Metrics of Component Based System for Reusability	September 2016
8	16MCS122	Syed Tanzeel Rabani	An Improved Cognitive Class Complexity Measure due to Inheritance	September 2017
9	16MCS120	S. Gayathri	A Temporal Cohesion Metric for Object Oriented Design	September 2017
10	16MCS117	Satiya Priya	Advanced Search Engine Optimization Technique using Decentralized Clustering Approach	September 2017
11	17MCS123	P. Lincy Adaikala Jothy	Identify the Peoples Involved in Social Media Discussion using an Improved Feature based K-Means Clustering	September 2018
12	17MCS107	J Johnsy	A Study On Various Cognitive Complexity Metrics	September 2018
13	19MCS105	Preethi jeralinhilda	Maintainability Index Computation Based on Cyclomatic Complexity and Halstead Measure for Python	September 2020

Personal Profile

• Languages Known : Tamil, English

• Nationality : Indian

• Personal Traits : Young, energetic, Optimist, Persistent

• Year of Experience : U.G - 13 + yrs. P.G - 13 + yrs. & M. Phil- 8 yrs.

(K. Maheswaran)