### **RESUME**

Name of the Staff : J. Karthikeyan

Designation : Assistant Professor

Date of joining in the college : 01.10.2021

E-mail Id : karthikeyan\_cse@nec.edu.in

karthikevanmecse@gmail.com

Mobile Number : 9042121989

**Personal Details** 

Age : 34

Date of Birth : 21.09.1989

Sex & Marital Status : Male & Married

Citizenship : Indian

**Educational Qualification** 



Educational Qualification	Branch	Name of the Institution/University	Yr. of Passing	% of Marks	Class / Division
M.E	Computer Science and Engineering	Thiagarajar College of Engineering, Madurai.	2013	8.11 (CGPA)	First Class With Distinction
B.E	Computer Science and Engineering	Pandian Saraswathi Yadav Engineering College, Sivagangai.	2011	65.08	First Class

### **Professional Experience (In chronological order)**

Designation	Institution/Organization	Period	Nature of Duties
Assistant Professor	National Engineering College, Kovilpatti	01.10.2021 to Till Now	Teaching
Research Associate (RA-1)	Thiagarajar College of Engineering, Madurai.	21.02.2019 to 30.09.2021	Research
Assistant Professor	K.L.N College of Engineering, Sivagangai.	29.06.2015 to 20.02.2019	Teaching
Assistant Professor	Madurai Institute of Engineering and Technology, Sivagangai.	29.11.2014 to 26.06.2015	Teaching
Software Developer	Century Minds, Madurai.	01.11.2013 to 28.11.2014	Software Developer

No. of years of Experience i. NEC : 2.8 Year ii . Other Colleges : 4.2 Year (Teaching)

iii. Industry: 1 Year iv. Other than above: 2.5 Year (Research)

**Area of Interest**: Metaverse, Virtual Reality (VR), Augmented Reality (AR), Artificial Intelligence (AI), Robotics, Machine Learning (ML), Computer Vision, Blockchain

# **List of Consultancy Projects**

S.No	Title of the Project	<b>Funding Agency</b>	Amount	Period
1.	Design and Development of Virtual Assistant with AI/ML and AR Tools, deployed onboard ships/submarines to support maintenance crew for Radar System	TryCAE Industrial Engineering Pvt. Ltd., - Trichy	Rs.3,50,000	2022-2023 (On Going)

### **List of Patent Published**

S.No	Title of the Patent	Patent Design No	Patent Published Date
1.	Machine Learning Based Fruit Grading Device	410594-001	15.03.2024

## **List of International Journals**

S.No.	Name of the Authors	Title of Paper	Name of Journal	Page No & Volume	Year of publication	Impact Factor
1.	Dr.A.Sheik Abdullah, Mr. J.Karthikeyan, Dr.V.Gomathi	Enabling Technology Integrated Learning for Autistic Children Using Augmented Reality Based Cognitive Rehabilitation	Springer Nature Computer Science	Vol. 5, Article No.151	2024	2.2
2.	Dr.D.Tamilselvi, Mrs.Manju Thomas, Mr. J.Karthikeyan	Cognitive Rehabilitation for Autism Children Mental Status Observation Using Virtual Reality Based Interactive Environment	Springer – International of Advanced Research in Engineering Technology – Intelligent Human Systems Integration	PP.1213- 1218 Vol.1131	2020	-
3.	Mr. J.Karthikeyan	Vision Based Autonomous Navigation Robot	IJSRD - International Journal for Scientific Research & Development	Vol.7 Issue.02	2019	-
4.	Mr. J.Karthikeyan	Gesture Control Surveillance Robot (GESBOT)	IJSRD - International Journal for Scientific Research & Development	Vol.7 Issue.01	2019	-

## **List of International Conference**

S.No	Name of the Faculty	Title of Paper	Name of the Conference	Year of publication
1.	Mr. J.Karthikeyan	Attention Contours: VR in ADHD Assessment	10th International Conference on Communication and Signal Processing - ICCSP 2024 Adhiparasakthi Engineering College, Melmaruvathur.	April 12-13, 2024

S.No	Name of the Faculty	Title of Paper	Name of the Conference	Year of publication
2.	Mr. J.Karthikeyan	Utilization of Deep Learning Techniques in an Innovative Approach for Covid-19 Prediction	6th International Conference on Recent Trends in Advanced Computing (ICRTAC'23) Vellore Institute of Technology, Chennai, India	December 14 2023
3.	Mr. J.Karthikeyan	File Integrity Monitoring	International Conference on "Communication, Cyber Security, Robotics, Artificial Intelligence and IoT – ICCCRAI 2022	June 24 2022
4.	Mr. J.Karthikeyan	Medical Steel Fault Prediction Using Deep Learning Techniques	Position and Communication Papers of the 16 <sup>th</sup> Conference on Computer Science and Intelligence Systems, Vol.26, pp.153-158, ISSN:2300-5963 DOI: 10.15439/2021F2	2021
5.	Mr. J.Karthikeyan	Personal Assistant Based Maneuver Robot	International Conference on Emerging Trends in Engineering, Technology, Science and Management.	2017

## **List of National Conferences**

S.No	Name of the Faculty	Title of Paper	Name of the Conference	Year of publication
1	Mr. J.Karthikeyan	Remote Exploration Surveillance Robot (RESBOT)	National Conference of NCRTIES 2K18	2018
2	Mr. J.Karthikeyan	Autonomous Fire Fighting Robot	National Conference of NCRTIES 2K18	2018
3	Mr. J.Karthikeyan	Mobile Robot Path Selection using Potential Field Algorithm (PFA) in Static Environment	National Conference on Information and Network Management (NCINM 2013)	2013

# List of Book Chapter

S.No	Name of the Faculty	Title	Name of the Book Chapter	Year of publication
1	Mr. J.Karthikeyan	Role of Blockchain in Healthcare Sector	IoT and Big Data Analytics, Vol.2, pp.48-62 DOI: 10.2174/978981508023012302 0005	2023

# **R&D Projects: Research Projects Sanctioned (Completed)**

S.No	Title of the Project	Principal Investigator	Co-Investigator	Funding Agency	Amount	Period
1.	"FashioNXT: Augmented Reality for Personalized Fashion Try-On"	Mr.J.Karthikeyan	Ms.S.G.Janani Ratthna	NewGen IEDC	Rs.1,00,000	2023- 2024
2.	Implementation of Augmented Reality and Virtual Reality in Mechanical Engineering Design	Dr.M.Vivekanandan	Mr.J.Karthikeyan	NewGen IEDC	Rs.2,50,000	2022- 2023
3.	6 – Axis Robot for Education Institution Laboratory	Mr.K.Pradeepraj	Mr.J.Karthikeyan	NewGen IEDC	Rs.2,50,000	2022- 2023
4.	Virtual Reality based cognitive rehabilitation for autism children to improve their social behavior	Ms.T.Manju	Dr.D.Tamilselvi	DST - CSRI	Rs.33,78,000	2018 to 2021

# $Short\ term\ Courses/Seminar/Conference/Workshop\ Attended$

S.No	Institution	Topic	Course Detail	Date
1.	SRM Ramapuram Campus	Harnessing Artificial Intelligence for Healthcare Excellence: Innovations, Insights and Impacts	FDP	24.06.2024 to 29.06.2024
2.	National Engineering College, Kovilpatti	Instructional Design and Delivery Systems	Professional Development Programme	16.05.2024 to 18.05.2024
3.	GITAM School of Technology, Bengaluru	Generative AI and Metaverse: Tools and Technologies for Improving the Teaching Learning Process in Higher Education	AICTE Sponsored ATAL FDP	04.12.2023 to 19.12.2023
4.	NPTEL Certification Course (IIT - Madras)	Design Thinking – A Primer	FDP	01.07.2023 to 31.08.2023
5.	NPTEL Certification Course (IIT - Madras)	Design Thinking – A Primer	NPTEL Certification	01.07.2023 to 31.08.2023
6.	NPTEL Certification Course (IIT - Madras)	Natural Language Processing	FDP	01.01.2023 to 30.04.2023
7.	NPTEL Certification Course (IIT-Kharagpur)	Natural Language Processing	NPTEL Certification	01.01.2023 to 30.04.2023

S.No	Institution	Topic	Course Detail	Date
8.	Naan Mudhalvan – Ingage Technologies	Augmented Reality, Virtual Reality & Metaverse Development	Industry Collaboration Training of Trainers	19.09.2022 to 30.09.2022
9.	NPTEL Certification Course (IIT-Kharagpur)	Data Structure and Algorithms using Java	NPTEL Certification (Elite Silver)	01.07.2022 to 30.10.2022
10.	NPTEL Certification Course (IIT - Madras)	Data Structure and Algorithms using Java	FDP	01.07.2022 to 30.10.2022
11.	NPTEL Certification Course (IIT - Madras)	Python for Data Science	NPTEL Certification (Elite Silver)	01.07.2022 to 31.08.2022
12.	NPTEL Certification Course (IIT - Madras)	Python for Data Science	FDP	01.07.2022 to 31.08.2022
13.	Sri Sai Ram Institute of Technology, Chennai.	Exploring Augmented Reality / Virtual Reality using Unity Tool	FDP	11.07.2022 to 15.07.2022
14.	NPTEL Certification Course (IIT-Kharagpur)	Programming In Java	NPTEL Certification	24.01.2022 to 24.04.2022
15.	Coursera Course – The University of North Carolina at Chapel Hill.	Positive Psychology	Online Course	18.05.2021
16.	MEPCO Schlenk Engineering College, Sivakasi.	NLP with Machine Learning	STTP	24.05.2021 to 28.05.2021
17.	Bannari Amman Institute of Technology, Sathyamangalam.	Augmented Reality End Product	Workshop	06.03.2021
18.	K.L.N. College of Engineering, Pottapalayam.	Exploring Real World Applications of Blockchain Technology with Machine Learning Models	AICTE Sponsored STTP	22.02.2021 to 27.02.2021
19.	MEPCO Schlenk Engineering College, Sivakasi.	Emerging Research Trends on Robotics and its Applications – (ERTRA-Phase III)	AICTE Sponsored STTP	05.10.2020 to 10.10.2020
20.	SRM Institute of Science and Technology Ramapuram Campus, Chennai.	Neural Nets	Webinar	29.07.2020 to 31.07.2020
21.	Sri Ranganathar Institute of Engineering and Technology, Coimbatore.	Robots in Covid-19 & Robotics and It's Future	Webinar	21.05.2020
22.	Sri Ranganathar Institute of Engineering and Technology, Coimbatore.	Development Tools and Opportunities of VR & AR in Industries	Webinar	20.05.2020
23.	Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi	Innovation, IPR, Entrepreneurship and Start-ups among HEI	MHRD's Innovation Cell, New Delhi	28.04.2020 to 22.05.2020

S.No	Institution	Topic	Course Detail	Date
24.	Kewaunee Lab Way, Bangalore.	Virtual Reality & Augmented Reality - Internship	Industry - Internship	26.08.2019 to 28.08.2019
25.	Ramco Institute and Technology, Rajapalayam.	Artificial Intelligence and Deep Learning	Workshop	14.09.2018 to 16.09.2018
26.	NPTEL Certification Course (IIT - Madras)	Programming, Data Structures and Algorithms using Python	NPTEL Certification	01.02.2018 to 31.03.2018
27.	NPTEL Certification Course (IIT-Kharagpur)	Programming in C++	NPTEL Certification	06.08.2018 to 05.10.2018
28.	NPTEL Certification Course (IIT-Kharagpur)	Introduction to Internet of Things	NPTEL Certification	30.07.2018 to 25.10.2018
29.	K.L.N. College of Engineering, Pottapalayam.	Train The Trainer Workshop on "Data Visualization"	Workshop	25.07.2018 to 27.07.2018
30.	WAVEPLUS SOFTECH, Chinna Chockikulam, Madurai.	Industrial Practical Training	Industrial Practical Training	04.06.2018 to 16.06.2018
31.	K.L.N. College of Information Technology, Pottapalayam.	Information Technology Essentials (IT8201)	FDTP	06.12.2017 to 12.12.2017
32.	Thiagarajar College of Engineering, Madurai.	Certification for Completion of Java Training	Spoken Tutorial IIT Bombay	09.09.2017
33.	Thiagarajar College of Engineering, Madurai.	Certification for Completion of Cpp Training	Spoken Tutorial IIT Bombay	09.09.2017
34.	Thiagarajar College of Engineering, Madurai.	Certification for Completion of C Training	Spoken Tutorial IIT Bombay	09.09.2017
35.	Saranathan College of Engineering, Trichy.	Business Communication and Team Work	FEP	29.05.2017 to 31.05.2017
36.	Thiagarajar College of Engineering, Madurai.	Artificial Intelligence Tools	Workshop	23.01.2017 to 15.01.2017
37.	Anjalai Ammal Mahalingam Engineering College, Tiruvarur.	CS6660 - Compiler Design	FDTP	28.11.2016 to 04.12.2016
38.	K.I. N. College of Information	Big Data Analytics	DST Sponsored – Training Program	22.06.2016 to 01.07.2016
39.	National Engineering College, Kovilpatti.	IT6503 - Web Programming	FDTP	06.06.2016 to 12.06.2016
40.	Kumaraguru College of Technology, Coimbatore.	Train The Trainer (TTT) on Python Programming	Infosys - Train The Trainer	30.05.2016 to 01.06.2016

S.No	Institution	Topic	Course Detail	Date
41	Thiagarajar College of Engineering, Madurai.	Free and Open Source Software	FDP	29.08.2015
42	K.L.N. College of Engineering, Pottapalayam.	Essential Traits of Teaching Methodologies	Workshop	13.08.2015

## Short term Courses/Conference/Workshops/Seminars Organized

S.No	Title	Duration	Number of Participants	Venue
1.	Innovation in AR/VR using Unity	03.02.2024 to 09.03.	13	National Engineering College
2.	Innovation in UI/UX using Figma	03.09.2023 to 04.11.2023	16	National Engineering College
3.	Exploring Virtual Reality for Beginners	01.01.2023 to 30.04.2023	30	National Engineering College
4.	Virtual Reality and Augmented Reality	03.10.2019 to 04.10.2019	120	Thiagarajar College of Engineering

### Specific Achievement if any

- i) NPTEL Discipline Star (Jan-Apr 2023)
- ii) UGC NET (Eligible for Assistant Professor 2019).
- iii) Task Completed (TBT-2016) in e-Yantra IIT Bombay.
- iv) Working Experience in Fire Bird V Robot, Raspberry Pi, Arduino.
- v) Chess Player, Ball Badminton Player, Cricket Player.

### AICTE NITTTR - 8 MODULE COURSE: First Phase - Completed

S. No	Module Name	Status
1	Module-1 Orientation Towards Technical Education and Curriculum Aspects	Completed
2	Module-2 Professional Ethics & Sustainability	Completed
3	Module-3 Communication Skills, Modes & Knowledge Dissemination	Completed
4	Module-4 Instructional Planning and Delivery	Completed
5	Module-5 Technology Enabled Learning & Life Long Self Learning	Completed
6	Module-6 Student Assessment and Evaluation	Completed
7	Module-7 Creative Problem Solving, Innovation and Meaningful R&D	Completed
8	Moduel-8 Institutional Management & Administrative Procedures	Completed

# **Expert Lecture Delivered**

S.No	Title	Venue	Date
1.	Augmented Reality (AR) and Virtual Reality (VR)	Computer Society of India Student's Branch, National Engineering College, Kovilpatti.	18.03.2023
2.	Augmented Reality for Mobile Application Development	Department of Computer Science, Thiagarajar College, Madurai.	03.09.2022
3.	Introduction to Virtual Reality and Augmented Reality	CompoNEC'22 – CSE Association, CSE Department, National Engineering College, Kovilpatti.	14.06.2022
4.	Problem Solving and Python Programming	K.L.N. College of Information Technology, Pottapalayam.	21.09.2017 to 22.09.2017

### **College Level Activities**

1. IEEE Computer Society (Students Chapter) – Member

# **Department Level Activities**

- 1. Augmented Reality & Virtual Reality Focus Group Head
- 2. Cisco and RM Lab Incharge
- 3. NBA Criteria 4 Member
- 4. NAAC Criteria 7 Member