

## Curriculum Vitae

Dedicated faculty with 19 years of experience in Computer Science and Engineering. Passionate about teaching, research, and mentoring, while integrating innovative pedagogical methods to enhance learning outcomes. Committed to advancing academic excellence and contributing to impactful research. Desire to learn new things and implement new techniques to further enhance my competence and productivity and contribute towards achieving the organizational objectives.



<b>Name</b>	Annie Sujith																																		
<b>Designation</b>	Associate Professor																																		
<b>Department</b>	Computer Science and Engineering																																		
<b>Date of Birth</b>	26/11/1983																																		
<b>Email</b>	annie.jithu@gmail.com																																		
<b>Contact No</b>	9686227321																																		
<b>Address</b>	Pariwar Palace Apartment, Devarachikkana halli road, Bannerghatta road, Bengaluru - 560076																																		
<b>Highest Degree</b>	Ph.D.																																		
<b>Research Interest</b>	Web Technologies, Computer networks, IOT																																		
<b>Academic Details</b>	<table border="1"><thead><tr><th>Sl. No.</th><th>Degree</th><th>Specialization</th><th>University</th><th>Class Obtained</th></tr></thead><tbody><tr><td>1</td><td>Ph.D.</td><td>CSE</td><td>VTU</td><td>NA</td></tr><tr><td>2</td><td>M.Tech.</td><td>Computer Network Engineering</td><td>VTU</td><td>First Division</td></tr><tr><td>3</td><td>B.E.</td><td>Computer Science and Engineering</td><td>Amravati University</td><td>First Division</td></tr><tr><td>4</td><td>HSLC</td><td>Computer Science</td><td>Amravati</td><td>Distinction</td></tr><tr><td>5</td><td>SSLC</td><td>State syllabus</td><td>Amravati</td><td>Distinction</td></tr></tbody></table>	Sl. No.	Degree	Specialization	University	Class Obtained	1	Ph.D.	CSE	VTU	NA	2	M.Tech.	Computer Network Engineering	VTU	First Division	3	B.E.	Computer Science and Engineering	Amravati University	First Division	4	HSLC	Computer Science	Amravati	Distinction	5	SSLC	State syllabus	Amravati	Distinction				
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5	SSLC	State syllabus	Amravati	Distinction																															

	Sl. No.	Organization	Designation	Experience in Years
<b>Professional Experience</b>	1	Novatech Software Pvt Ltd., Nagpur, Maharashtra	Software Engineer	01 year
	2	City Engineering College, Bengaluru, Karnataka	Lecturer	03.6 years
	3	T. John Institute of Technology, Bengaluru, Karnataka	Asst. Professor	11 years
	4	Windfall Productions Pvt Ltd, Thrissur, Kerala	Content Editor	01 year
	5	Jyothy Institute of Technology	Assoc. Professor	02.10 years
	6	RV Institute of Technology and Management	Assoc. Professor	January 2026 to Till Date
	<b>Professional Membership</b>	ISTE Lifetime Membership		
<b>Courses Taught</b>	DBMS, Operating System, Computer Networks, Python Programming, Principles of Programming, Software Engineering and Project Management, Data mining and Data Warehousing, OOPS with C++, Object Oriented Analysis and Design, Advanced Computer Architecture, Computer Organization, Java programming, Web Technology and its Application, Software testing, Parallel Programming			
<b>Publications</b>	<ol style="list-style-type: none"> <li>1. "AI-Driven Deep Learning Framework for Prediction and Energy-Efficient Optimization in IoT-enabled Wireless Networks", International Journal of Machine Learning and Cybernetics, SCI indexed and Q2 Journal, IF: 3.3, Springer Nature (Under Review).</li> <li>2. Book Chapter "Blockchain-Anchored Model Lifecycle Governance for Privacy-Preserving Biomedical AI Systems", for the Book entitled "AI Governance Platforms: Frameworks, Principles and Practices" in Wiley (Acceptance Email received from editorial team).</li> <li>3. "Fundus Image Restoration and Enhancement Using Multi-Resolution CNN Framework", in Applied Artificial Intelligence and Machine Learning Techniques for Engineering Applications, <b>Taylor &amp; Francis/CRC Press, September 2025</b>, DOI: <a href="https://doi.org/10.1201/9781003473442">https://doi.org/10.1201/9781003473442</a> (<b>Scopus Indexed</b> Book Chapter)</li> <li>4. "Integrating IoT and Data Science for Sustainable Disposal Solutions to Enhance Agricultural Soil Health and Productivity", in Producing Healthy Food with Healthy Soils, <b>Springer Nature, August 2025</b>, DOI: <a href="https://doi.org/10.1007/978-3-031-82536-1_9">https://doi.org/10.1007/978-3-031-82536-1_9</a> (<b>Scopus Indexed</b> Book Chapter)</li> </ol>			

**Publications (contd.)**

5. "Image Restoration and Enhancement of Retinal images using Multi-Resolution Dual CNN", **IEEE Xplore 2025, (Scopus Indexed)**, DOI: [10.1109/iCon-BCIHT63907.2024.10882339](https://doi.org/10.1109/iCon-BCIHT63907.2024.10882339)
6. "Energy Efficient Routing Algorithm using Zone-based Hybrid Cluster Chain Approach in Wireless Sensor Networks", *IEIE Transactions on Smart Processing and Computing*, vol. 13, no. 6, **December 2024, (Scopus Indexed)**, DOI: <http://doi.org/10.5573/IEIESPC.2024.13.6.654>
7. "Efficient network management and security in 5G enabled internet of things using deep learning algorithms", *International Journal of Electrical and Computer Engineering (IJECE)*, **2024, (Scopus Indexed)**, DOI:[10.11591/ijece.v14i1.pp1058-1070](https://doi.org/10.11591/ijece.v14i1.pp1058-1070)
8. "NLP Techniques In Resume Analysis for Applicants and Recruiters", *International Research Journal of Modernization in Engineering Technology and Science*, Volume: 06 / Issue:05 / **May-2024**
9. "Surface Electromyography (sEMG) Signal Based Speech Recognition of Using Depressor Anguli Oris, Mentalis, and Masseter Muscles of Human Being" *Journal of Chemical Health Risks (JCHR)*, **2023, (Scopus Indexed)**, Volume: 13(4s), Pages: 439-455, DOI: [10.1088/1742-6596/1237/3/032008](https://doi.org/10.1088/1742-6596/1237/3/032008)
10. "Real-Time Regulation of Traffic in Response to Changes", *International Journal of Research Publication and Reviews*, Vol 4, no 5, pp 4860-4869, May **2023**
11. "Energy-Efficient Adaptive Routing Algorithm Based on Fuzzy Inference System using Zone-Based Clustering of Wireless Sensor Network," *International Journal of Engineering Trends and Technology*, vol. 70, no. 6, pp. 221-236, **2022, (Scopus Indexed)**, DOI: <https://doi.org/10.14445/22315381/IJETT-V70I6P224>
12. "Energy-Efficient Zone-Based Clustering Algorithm Using Fuzzy Inference System for Wireless Sensor Networks", *Engineering Reports, Wiley*, 3 (**2021**) e12310, (**Scopus Indexed**), DOI: <https://doi.org/10.1002/eng2.12310>.
13. "A Survey of Methods for Enhancing Throughput of Wireless Sensor Network", *International Journal of Computer Engineering and Applications*, Volume XII, Special Issue, May 18
14. "QOS Requirements and Challenges Faced in Wireless Sensor Network", *International Journal of Computer Engineering and Applications*, Volume XII, Special Issue, June 18

	<p>15. "Performance Evaluation and Throughput Maximization of Wireless Sensor Networks: Survey", International Journal of Science, Engineering and Technology, Open Access Journal, ISSN (O): 2348-4098 , ISSN (P): 2395-4752, June 2017</p> <p>16. "Comprehensive Overview On Security Solutions for Mobile Devices", International Journal of Research in Engineering and Technology– volume5, Special Issue 04, ISSN 2319 - 1163, May 2016</p> <p>17. "Assessment of Approaches used for Securing Mobile Devices", in International Journal of Engineering Research and Technology, volume 4, Issue 22, ISSN 2278 - 0181, April 2018</p>
<p><b>Papers Presented at National/International Conferences</b></p>	<p>1. Presented a paper titled "Advances in Data Science and Big Data Analytics: Techniques, Applications, and Challenges" at the International Conference on Smart Wireless Systems and IoT (SWSIoT-2025), <b>Springer Conference</b>, held on <b>September 18–19, 2025</b>.</p> <p>2. Presented a paper titled "Image Restoration and Enhancement of Retinal images Using Multi-Resolution Dual CNN" at International Conference on Brain Computer Interface &amp; Healthcare Technologies (iCon-BCIHT), Organized by Shinawatra University, Thailand held between 08<sup>th</sup> to 11<sup>th</sup> November, <b>2024</b>, DOI: <a href="https://doi.org/10.1109/iCon-BCIHT63907.2024.10882339">10.1109/iCon-BCIHT63907.2024.10882339</a></p> <p>3. Presented a paper titled "GenoInsight: Deciphering the Language of Gene Expression," at 10<sup>th</sup> National Conference on "Advancements in Information Technology" NCAIT-<b>2024</b> organized by department of Information Science and Engineering JSSATE</p> <p>4. Presented a paper titled "A Novel Approach to Identify Diabetic Macular Edema Using a Minimal CNN Model", at 1st International Conference on Optimization Techniques for Learning (ICOTL - <b>2023</b>), 979-8-3503-2804-2/23/<b>IEEE</b>, DOI: <a href="https://doi.org/10.1109/ICOTL59758.2023.10435002">10.1109/ICOTL59758.2023.10435002</a></p> <p>5. Presented a paper titled "A Survey of Methods for Enhancing Throughput of Wireless Sensor Network" at National Conference on Recent Advances in Technology and Engineering, Bengaluru, 2018</p> <p>6. Presented a paper titled "QoS Requirements And Challenges Faced In Wireless Sensor Network" at National Conference named RATE - 2018 organized by TJIT, Bengaluru.</p> <p>7. Presented a paper titled "Performance Evaluation and Throughput Maximization of Wireless Sensor Networks: Survey" in National Conference on Recent Advances in Technology and Engineering, Bengaluru, 2017</p>

<p><b>Papers Presented at National/International Conferences (contd.)</b></p>	<ol style="list-style-type: none"> <li>8. Presented a paper titled “Assessment of security challenges and remedies in IOT applications” at National Conference on Recent Advances in Technology and Engineering, Bengaluru, 2017</li> <li>9. Presented a paper titled “A Smart Parking System for a Smart City” in an International Conference on Applied Science Engineering and Technology organized by Sri Sairam College of Engineering, Anekal, Bengaluru, June 2016</li> <li>10. Presented a paper titled “Assessment of Approaches Used for Securing Mobile Devices” at an International Conference on Advanced Computing Techniques organized by AMC College of Engineering, Bengaluru, May 2016</li> <li>11. Presented a paper titled “An efficient authentication protocol for the primary issue in cloud storage based on shared access authority mechanism” at an International Conference on Engineering, Science, Management and Advances in Research Technology, Bengaluru, April 2015</li> <li>12. Presented a paper titled “GoSmart using Cloud computing and Social media” at a National Conference on Recent Advances in Technology and Engineering, Bengaluru, March 2015</li> <li>13. Presented a paper titled “Cloud Computing for Mobile user - offloading computation to save energy” in an International Conference named ICESMART organized by TJIT, Bengaluru.</li> <li>14. Presented a paper titled “Map-reduce for Big Data applications using keyword aware service recommendation method” at an International Conference on Engineering, Science, Management and Advances in Research Technology, Bengaluru, April 2015</li> <li>15. Presented a paper titled “Comprehensive Overview On Security Solutions for Mobile Devices” at an International Conference named ICESMART 2016 organized by TJIT, Bengaluru.</li> </ol>
<p><b>Projects Undertaken</b></p>	<ol style="list-style-type: none"> <li>1. National level Patent published (<b>2025</b>) for project “AI-Driven Medication Management System with Doctor-Patient Synchronization”, Application no.: 202541032486</li> <li>2. Research proposal titled “AI-Driven Medication Management System with Doctor-Patient Synchronization” has been submitted under the AICTE Research Promotion Scheme (RPS) - the ‘Lab to Market <b>2025</b>’ initiative of AICTE to seek grant support.</li> </ol>

<p><b>Projects Undertaken (contd.)</b></p>	<ol style="list-style-type: none"> <li>3. My Final Year Project Team secured the Third Prize at the State-Level Inter-Collegiate Project Exhibition – Tech Tarang <b>2025</b>, held on 13th May 2025.</li> <li>4. My Final Year Project Team was selected for the Grand Finale of IEEE YESIST12 <b>2025</b> (International Project Innovation Challenge) which was conducted exclusively In physical mode at IEEE UKM Student Branch, Malaysia.</li> <li>5. National level Patent published (<b>2024</b>) for project “AI Powered Malware Protection for IOT Devices”, Application no.: 202441062385</li> <li>6. Funding received by KSCST (<b>2024</b>) for the project “Resume Analyser for Recruiters and Applicants”</li> <li>7. Patent grant received for “IOT based Bio Cardiac Diagnostic System” (2024), Application No.: 431729-001</li> <li>8. National level Patent published (<b>2023</b>) for project “System and Method for Optimising Range of an Electronic Article Surveillance System”, Application no.: 202311065375</li> <li>9. National level Patent published (<b>2022</b>) for project “IOT based Portable Health Monitoring System”, Application no.: 202241073507</li> <li>10. Working on project “AI-Driven Medication Management System with Doctor-Patient Synchronization”.</li> <li>11. Working on project “AI-Powered Dementia Care Companion: An Intelligent Assistive System for Memory Aid, Safety, and Thought-to-Text Support”.</li> </ol>
<p><b>NPTEL, FDP and Workshops Attended</b></p>	<p><b>FDPs attended (only for the year 2025(till date) are mentioned):</b></p> <ol style="list-style-type: none"> <li>1. Research Grant Writing and Management” conducted from 19th to 21st January 2026 through the Centre for Continuing Education (CCE), IISc</li> <li>2. A five-day FDP on “Quantum Computing” from 19th January 2026 to 23d January 2026 organized by Department of Computer Science and Engineering, RVITM, Bengaluru</li> <li>3. Blockchain Basics Course by Cyfrin Updraft, Feb 2026</li> <li>4. AI tools workshop by Be10x, April 2026</li> <li>5. AI and Security: Current Trends and Future Research, SJC Institute Of Technology, AICTE, <b>20/01/2025 to 25/01/2025</b></li> <li>6. VTU – EBSCO &amp; AMA training, Jyothy Institute of Technology, <b>03/04/2025</b></li> <li>7. Parallel Computing, E&amp;ICT Academy IIT Guwahati, in association with RV Institute of Technology And Management, Bengaluru, <b>23/06/2025 to 27/06/2025</b></li> <li>8. Fundamentals of Accelerated Computing with CUDA Python, NVIDIA, <b>27/06/2025</b></li> <li>9. Educate the Educator’ on Generative AI, Jyothy Institute of Technology, <b>23/08/2025</b></li> <li>10. Data Analytics Certification by Qlik Analytics, Online self paced course, Completion certificate received on <b>06/09/2025</b></li> <li>11. Responsible generative AI and its applications, Jyothy Institute of Technology, <b>8<sup>th</sup> Sep 2025 - 13<sup>th</sup> Sep 2025</b></li> </ol>

	<p><b>NPTEL Courses completed:</b></p> <ol style="list-style-type: none"> <li>12. Received Certificate (May <b>2025</b>) for NPTEL-AICTE FDP on Real Time Operating System (also received the <b>NPTEL Topper Badge</b>).</li> <li>13. Received NPTEL+ workshop certificate (April <b>2025</b>) for “Introduction to Data Engineering Using Azure” by IIT, Madras</li> <li>14. Received Certificate (August <b>2024</b>) for NPTEL-AICTE FDP on Python for Data Science.</li> <li>15. Received Certificate for NPTEL-AICTE FDP on Academic Writing (also received the <b>NPTEL Topper Badge</b>).</li> </ol> <p><b>Trainings Undertaken:</b></p> <ol style="list-style-type: none"> <li>16. Innovation Ambassador Foundation Level Training, MoE's Innovation Cell</li> <li>17. Innovation Ambassador Advanced Level Training, MoE's Innovation Cell</li> <li>18. Web Development Bootcamp, Udemy</li> <li>19. FDP on Inculcating Universal Human Values in Technical Education (UHV-1), AICTE</li> <li>20. Journey to Cloud: Envisioning your Solution, IBM</li> <li>21. Python for Data Science, IBM</li> <li>22. Data Analysis with Python, IBM</li> <li>23. Faculty Buildathon 2022 in AI, IBM</li> </ol>
<p><b>Any other Achievements</b></p>	<ol style="list-style-type: none"> <li>1. Certificate of Appreciation received for presiding as Session Chair at a National Conference on Computational Intelligence and Applications - 2024 at AMC Engineering College, Bengaluru</li> <li>2. Received Manuscript Reviewer Certificate (2024) by Springer Nature</li> <li>3. Reviewed manuscript titled "Diffusion-Driven Proxy Learning Strategy with Secure Peer Interactions for Generative Intelligence in Cyber-Physical System" submitted to JoVE journal indexed in PubMed, Web of Science etc.</li> <li>4. Reviewed manuscript titled "HyperLSTM for Anomaly Detection Model for VANET Security Using the VeReMi Extension Dataset" for the International Journal of Distributed Sensor Networks (Wiley) indexed in Web of Science (SCIE), Scopus etc.</li> <li>5. Certificate of Appreciation received for delivering a technical session on "Digital Transformation and Innovation using Artificial Intelligence" on 28<sup>th</sup> December 2023, at AMC Engineering College, Bengaluru - 560083.</li> <li>6. Reviewed manuscript titled "Applied AI to Predict Software Defects by DeepCluster LSTM: An Ensemble using LSTM and k-Means Clustering Approach" submitted to IET Software, Wiley indexed in SCIE, Scopus, SCImago etc.</li> <li>7. Presided as a session chair at the CIA-2024 National Conference held at JIT, Bengaluru</li> <li>8. Presided as a session chair at the International Conference on “Engineering, Science, Management and Advances in Research Technology” held at TJIT, Bengaluru</li> </ol>

**Any other  
Achievements  
(contd.)**

9. Reviewed manuscript titled "DAVENR: A Noise-Regularized Adaptive Voting Ensemble for IoT-Driven Mental Health Risk Prediction" for the journal Human-centric Computing and Information Sciences indexed in Web of Science (SCIE), Scopus, SCImago etc.
10. Reviewed manuscript titled "Improving Healthcare Sustainability through Enhanced Brain Simulations using Multi-Modal Deep Learning Approach with VGG19 and Bidirectional LSTM" for the journal Frontiers in Medicine section Precision Medicine indexed in PubMed Central (PMC), Web of Science (SCIE), Scopus etc.
11. Reviewed manuscript titled "Enhancing Image-Based Diagnosis of Gastrointestinal Tract Diseases through Deep Learning with Efficient Net and Advanced Data Augmentation Techniques" for the BMC Medical Imaging (Springer) indexed in Scopus, EBSCO, SCImago etc.
12. Reviewed manuscript titled "Transfer Learning Driven Multi-Aspectual Framework for Mental Disorder Assessment" for the journal ACM Transactions on Asian and Low-Resource Language Information Processing.
13. Reviewed manuscript titled "Enhancing Wearable Activity Recognition through Intelligent IoT for Digital Transformation using Multimodal Analysis" for the Human-centric Computing and Information Sciences indexed in Web of Science (SCIE), Scopus, SCImago etc.
14. Reviewed manuscript titled "Employing exception Convolutional Neural Network through High-Precision MRI Analysis for Brain Tumour Diagnosis" for the journal Frontiers in Medicine indexed in PubMed Central (PMC), Web of Science (SCIE), Scopus etc.
15. Reviewed manuscript titled "Z-MSP: Zonal-Max Stable Protocol for Wireless Sensor Networks" for Engineering, Technology & Applied Science Research indexed in Scopus, Clarivate's ESCI, Google Scholar etc.
16. Certificate of Excellence received for Reviewing (2024) from Asian Journal of Research in Computer Science.
17. Certificate of Excellence (2024) received for Reviewing book chapters from BP International publisher.
18. Reviewed manuscript titled "Redefining Retinal Vessel Segmentation: Empowering Advanced Fundus Image Analysis with the Potential of GANs for the journal Frontiers in Medicine indexed in PubMed Central (PMC), Web of Science (SCIE), Scopus etc.
19. Reviewed manuscript titled "Scientific Landscape on the Topic of Programming Language and Game Development" for the journal Asian Journal of Research in Computer Science.

	<p>20. Reviewed Book Chapter titled "Hyperparameters analysis of long short-term memory architecture for crop classification" for the publisher BP International.</p> <p>21. Session Coordinator of the National Conference "RATE" and International Conference ICESMART held at TJIT, Bengaluru</p>
<p><b>Ongoing &amp; Completed Research Projects</b></p>	<ul style="list-style-type: none"> <li>• Development and Validation of a Customized Telerehabilitation for Urinary Incontinence Management in Women</li> <li>• Blockchain-Based Anti-Counterfeit Product Verification System with Cryptographic QR Authentication and Geo-Spatial Scan Tracking</li> <li>• Decentralized Academic Certificate Verification using Blockchain</li> <li>• Secure API Gateway with Attack Detection</li> <li>• AI-Powered Dementia Care Companion</li> <li>• AI-Driven Medication Management System with Doctor-Patient Synchronization</li> <li>• Resume Analyzer for Recruiters and Applicants</li> <li>• Real-Time Regulation of Traffic in Response to Changes</li> </ul>
<p><b>Innovative Teaching Methodologies implemented by me (last two years)</b></p>	<ol style="list-style-type: none"> <li>1. <b>Integrated Agile Tools Assignment using Google NotebookLM:</b> Guided students to explore platforms like Jira, Trello, and Asana through structured research and AI-assisted synthesis. Students created notebooks, summaries, and mind maps, and delivered short presentations demonstrating their findings. This activity fostered <b>independent learning, collaboration, communication skills, and practical understanding of Agile project management frameworks.</b></li> <li>2. <b>Blended DBMS Learning with Traditional + AI Approaches:</b> Combined XAMPP, HTML/CSS, MySQL with Agentic Code Development, Prompt Engineering, and AI Agents. Enabled students to build real-world DBMS projects while boosting <b>industry readiness, confidence, and problem-solving skills.</b></li> <li>3. <b>Peer Tutoring Model for OS Concepts:</b> Structured academically strong students to mentor peers on CPU Scheduling, Deadlocks, and Semaphores. Enhanced <b>collaborative learning, critical thinking, and conceptual depth</b> through group activities and discussions.</li> <li>4. <b>Interactive Video-based Learning (TED-Ed):</b> Designed customized lessons with embedded questions and prompts. Encouraged <b>active engagement, immediate feedback, and improved retention</b> of complex concepts.</li> <li>5. <b>Activity-based Python Learning (Spin Wheel):</b> Used a gamified spin wheel to randomly select students for coding/problem-solving questions. Increased <b>participation, reduced stage fear, and strengthened logical thinking.</b></li> <li>6. <b>Final-Year Student-led Guidance Sessions:</b> Organized peer-led mentoring where senior students shared projects,</li> </ol>

**Innovative Teaching Methodologies implemented by me (last two years) (contd.)**

internship insights, and career preparation strategies. Inspired juniors and fostered **early engagement in projects and professional growth.**

7. **Placard-based Python Keyword Activity:** Conducted team-based activity where students acted out Python keywords, modules, and functions. Promoted **teamwork, communication skills, and concept reinforcement** in a fun and competitive way.
8. **Mentimeter Integration in DBMS Lectures:** Leveraged real-time polls, quizzes, and word clouds to assess understanding. Made learning **interactive, participatory, and feedback-driven.**

**Declaration:**

I hereby declare that all the above details furnished by me are correct to the best of my knowledge, and I bear the responsibility for the correctness of the above-mentioned particulars.

**Date: 28/04/2026**

**Place: Bengaluru**



**Dr. Annie Sujith**