

SHRUTHI. K

Affiliation (Assistant Professor, Dept of Computer Science and Engineering, SIT)

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Education

	Degree	Year	Institute	Specialization
1	(Ph.D)	2025	Visvesvaraya Technological University	Computer Science and Engineering
2	M.Tech.	2014	Siddaganga Institute of Technology, Tumkur. Visvesvaraya Technological University.	Computer Science and Engineering
3	B.E	2012	CIT Gubbi, Tumkur, VTU.	Information Science and Engineering

Professional Experience

	Date (from-to)	Designation	Organization
1	From: 27- July - 2016	Assistant Professor	Siddaganga Institute of Technology
2	From 11-Jan-2016 to 26-July-2016	Assistant Professor	Sapthagiri College of Engineering
3	From 14-July-2014 to 14-Dec-2015	Assistant Professor	CMRIT

Positions held

- Major Project coordinator
- Mini-project coordinator
- Proctoring students
- DBMS Lab coordinator
- DS Lab Coordinator

- ADA Lab Coordinator
- Guiding mini and major projects
- Involved in the design and development of course syllabus for the following subjects:
 - Foundations of computer Programming .
 - Foundations of computer Programming Lab .
 - Analysis and Design of Algorithms.
 - Database Management Systems.

Affiliations of Professional organizations

- IAENG IJCS Lifetime membership

Awards and Honors

- Received Best Paper Award for outstanding research and presentation of paper. IEEE K.Shruthi, A.S.Poornima, "SafeMeds: A Blockchain-Driven Drug Supply Chain Verification System" 2024 IEEE International Conference on Recent Advances in Science Engineering Technology (ICRASET).

Courses Taught

Undergraduate Courses

- Database Management Systems
- Data Structures
- Operating Systems
- Data Structures and Applications
- Analysis and Design of Algorithm
- C programming for problem solving
- Foundation of Computer Programming
- Theory of Computation
- UNIX and Shell Programming

Research Areas

- Database Management Systems
- Blockchain Technology
- Cloud Computing
- Machine Learning

Publications

Journals

1. K. Shruthi and A. S. Poornima, (2024), A review of blockchain applications and healthcare informatics. *International Journal of Safety and Security Engineering*, Vol.14, No. 1, pp. 267-287. <https://doi.org/10.18280/ijssse.140127>.
2. K. Shruthi and Poornima A.S “Leveraging Blockchain Technology to Establish a Transparent and Counterfeit-Resistant Pharmaceutical Supply Chain,” *J. Eur. des Syst. Autom.*, vol. 57, no. 5, pp. 1429–1443, 2024, doi: 10.18280/jesa.570518.
3. K. Shruthi and A. S. Poornima, “Medical Data Asset Management and an Approach for Disease Prediction using Blockchain and Machine Learning,” *Int. J. Eng. Trends Technol.*, vol. 71, no. 4, pp. 491–514, 2023, doi: 10.14445/22315381/IJETT-V71I4P242.
4. K. Shruthi, A. S. Poornima, M. Shariff, S. M. Pradeep Singh, D. P. Subramanyam, and M. H. Varun, “Convolutional Neural Network For Detection Of Oral Cavity Leading To Oral Cancer From Photographic Images,” *Int. J. Comput. Digit. Syst.*, vol. 15, no. 1, pp. 865–877, 2024, doi: 10.12785/ijcnds/150162.
5. K. Shruthi and A. S. Poornima, “International Journal of Intelligent Systems and Applications in Engineering (IJISAE)” A Method for Predicting and Classifying Fetus Health Using Machine Learning,” vol. 11, no. 2, pp. 752–762, 2023.
6. K Shruthi and Poornima A.S “Securing Patient Data and Access Control in Electronic Health Records with Ethereum Blockchain”. *Bulletin of Electrical Engineering and Informatics*.
7. Shruthi.k “An approach for improving elasticity in cloud computing using Neural Networks”. In *International journal of combined research and development* Volume 3, Issue 6 December 2014.
8. Shruthi K, Harikrishnan V S Agriculture Management System Using Internet Of Things, *International Journal Of Innovative Research In Science, Engineering And Technology* Volume 7/Issue 6/June 2018.
9. Shruthi K, A Low Cost Prosthetic Hand Using Flex Sensors And Servo Motors, *International Journal of Engineering Research & Technology (IJERT)*ISSN: 2278-0181 Published by, www.ijert.org Volume 6, Issue 13Special Issue – 2018.
10. Shashank L R, sanjay B S, Suhas K s, Mahantesha k, Shruthi K, “ Internet Mobile robot for Industries”, *International Journal Of Research In Electronics And Computer Engineering*”, Vol 7, Issue 2, April- June 2019, ISSN: 2393-9028(print), 2348-2281(Online).
11. Amitha N S, Deepika N, Manasa S, Bhavana J, Shruthi K“ Android Anti-Theft Application using Google Drive”, *International Journal Of Research In Advent Technology*, Special Issue March 2019, E- ISSN:2321-9637.

Conference Proceedings

1. K. Shruthi and A. S. Poornima, “Blockchain and its applications in healthcare data: A survey,” in *12th International Conference on Advances in Computing, Control, and Telecommunication Technologies, ACT 2021*, 2021.
2. K. Shruthi, Poornima A.S, A. M. Siri et al., “Novel Approach for Disease Prediction in Healthcare using Blockchain and Machine Learning,” in *13th International Conference on Advances in Computing, Control, and Telecommunication Technologies, ACT 2022*, 2022.
3. K.Shruthi, Poornima A.S, A. Srivastava et al., “Blockchain based Medical Data Asset Management System,” in *13th International Conference on Advances in Computing, Control, and Telecommunication Technologies, ACT 2022*, 2022.

4. K. Shruthi and A. S. Poornima, "Blockchain and IoT-Based Medical Care Utilizing Secure and Protection Safeguarding Watermark," Int. Conf. Smart Syst. Appl. Electr. Sci. ICSSSES 2023, pp. 1–6, 2023, doi: 10.1109/ICSSSES58299.2023.10199222. IEEE
5. K. Shruthi and A. S. Poornima, "A Transparent and Privacy-Preserving Job Search Platform Built on the Ethereum Blockchain Framework," Proc. 2023 IEEE 2nd Int. Conf. Ind. Electron. Dev. Appl. ICIDeA 2023, pp. 235–242, 2023, doi: 10.1109/ICIDeA59866.2023.10295065.
6. S. M. Pradeep Singh, M. Shariff, D. P. Subramanyam, M. H. Varun, K. Shruthi, and A. S. Poornima, "Real Time Oral Cavity Detection Leading to Oral Cancer using CNN," 2023 Int. Conf. Network, Multimed. Inf. Technol. NMITCON 2023, 2023, doi:10.1109/NMITCON58196.2023.10275851.IEEE
7. K. Shruthi, A. S. Poornima, D. Ankitha, R. Srilakshmi, and J. Yoganandini, "Healthcare Insurance Fraud Detection Powered by Blockchain and Machine Learning : An Analysis and Framework," 2024 IEEE Int. Conf. Smart Power Control Renew. Energy, pp. 1–6, 2024, doi: 10.1109/ICSPCRE62303.2024.10675307.
8. K. Shruthi, A.S. Poornima, "SafeMeds: A Blockchain-Driven Drug Supply Chain Verification System" 2024 IEEE International Conference on Recent Advances in Science Engineering Technology (ICRASET). ***Received Best Paper Award for outstanding research and presentation of paper. IEEE***
9. K. Shruthi, A.S. Poornima, "Tumakuru Siddaganga Hospital's Decentralisation of Electronic Health Records: An Ethereum-Based Blockchain Framework for Improved Security and Patient Control" 2025 IEEE 3rd International Conference on Knowledge Engineering and Communication Systems (ICKECS-2025).
10. Shruthi.k, Dr.B.Sathish Babu, "Context Aware Data Centers Allocation in Cloud Computing Environment". In International Conference on Emerging Computation and Information Technology (ICECIT) (ELSEVIER), November 2013 SIT, Tumkur.
11. Shruthi.k, "A Low Cost Prosthetic Hand Using Flex Sensors And Servo Motors" In National Conference on Electronics, Signals & Communication (NCESC-2017) May 29th GSSSIET for Women Mysuru.
12. Shruthi K, Harikrishnan V S Agersense - An lot Based Agriculture System page no 12. 39, International Conference On Sustainable Advance Computing ICSAC 2018, 2 – 3 March 2018.
13. Amitha N S, Deepika N, Manasa S, Bhavana J, Shruthi K " Android Anti- Theft Application using Google Drive", International Conference on Sustainable Advanced Computing & Statistical Techniques (ICSACST-2019) March 2019. Page no.16
14. Shashank L R, sanjay B S, Suhas K S, Mahantesha k, Shruthi K, " Internet Mobile robot for Industries", 3 rd National Conference on Engineering Innovations and Solutions NCEIS-2019 on 23rd April 2019.
15. Shruthi. K, C. H S, A. S, C. P, and A. N, "An IoT Enabled Green Farming Using Image Processing," SSRN Electron. J., no. May, pp. 1166–1169, 2020, doi: 10.2139/ssrn.3667440.

Invited Lectures, talks and workshops

1. A foundational understanding of systematic research practices was strengthened through the successful completion of the NPTEL course on Research Methodology, earning the Elite Silver certification.

2. Professional Certificate Program in Blockchain (Simplilearn) held from 18th March 2023 to 25th June 2023, IIT, Kanpur.
3. ALL INDIA COUNCIL FOR TECHNICAL EDUCATION, Nelson Mandela Marg, Vasant Kunj, New Delhi -110070, AICTE Training and Learning (ATAL) Academy. Smart Healthcare Systems: Enhancing Patient Care with IoT and AI at Amity School of Engineering & Technology, Amity University from 02/12/2024 to 07/12/2024.
4. AICTE Training and Learning (ATAL) Academy Faculty Development Program on Exploring the Intersection of Blockchain Technology and Generative AI: Advancements, Applications, and Future Directions at SPHOORTHY ENGINEERING COLLEGE from 03/02/2025 to 08/02/2025.
5. High-End Workshop on Recent research trends in AI, ML and their applications at IIIT Dharwad from 21-dec-2023 to 28-dec-2023.