

CONTACT INFORMATION	Koottappoovathinkal House Karamala P.O, Poovakulam Kottayam - 686662, India	Phone: +91 9895327107 E-mail: sunsks@gmail.com
RESEARCH INTERESTS	Formal Language and Automata Theory, Computational Complexity Unconventional models of Computation, Compiler Design	
EDUCATION	<ul style="list-style-type: none"> • Doctor of Philosophy (PhD) July 2017 <ul style="list-style-type: none"> • University: IIT Madras, Chennai, India. • Area: Automata and Complexity Theory • Thesis Title: Space Complexity of Labelled Graph Reachability Problems - New Characterizations and Dichotomies. • Adviser: Dr. Jayalal Sarma M N • CGPA: 7.75 out of 10 • Master of Technology in Computer Science & Engg. May 2011 <ul style="list-style-type: none"> • University: IIT Madras, Chennai, India. • Thesis Title: Tree Insertion Systems. • Adviser: Prof. Kamala Krithivasan • CGPA: 8.78 out of 10 • Bachelor of Technology in Computer Science & Engg. June 2006 <ul style="list-style-type: none"> • Institution: Mangalam College of Engineering, Ettumanoor, Kerala. • University: Mahatma Gandhi University, Kottayam, Kerala • Marks in %: 70.8 • Higher Secondary Examination (+2) May 2002 <ul style="list-style-type: none"> • Institution: SNDP Higher Secondary School, Muvattupuzha, Kerala. • Marks in %: 83.11 • S.S.L.C May 2000 <ul style="list-style-type: none"> • Institution: High School, Koothattukulam, Kerala. • Marks in %: 85.67 	
PROFESSIONAL EXPERIENCES	<ul style="list-style-type: none"> • Asst.Professor in the Department of Computer Science and Engineering, Government Engineering College Idukki, Kerala March 2020- till date • Lecturer in the Department of Computer Engineering, Government Polytechnic College, Pala, Kottayam, Kerala Nov 2015 - March 2020 • Asst.Professor in the Department of Computer Science and Engineering, Amal Jyothi College of Engineering, Kanjirappally, Kerala May 2011 - Dec 2011 • Lecturer in the Department of Computer Science and Engineering, Amal Jyothi College of Engineering, Kanjirappally, Kerala Feb 2007 - Aug 2009 • Lecturer in the Department of Computer Science and Engineering, Mangalam College of Engineering, Ettumanoor, Kerala July 2006 - Feb 2007 	
PUBLICATIONS	<ul style="list-style-type: none"> • Journal Publications <ul style="list-style-type: none"> • K. S. Sunil and P. Sunilkumar. <i>Answer Book Valuation Using Semantic Similarity</i>. IOP Conference Series: Materials Science and Engineering. 1081(2021) 012018. • Vidhya Ramaswamy, Jayalal Sarma and K.S. Sunil. <i>Space Complexity of Reachability Testing in Labelled Graphs</i>. Journal of Computer and System Sciences. 2019 • Balagopal Komarath, Jayalal Sarma and K.S. Sunil. <i>Comparator Circuits over Finite Bounded Posets</i>. Information and Computation. 261 (2018) 160-174 • Balagopal Komarath, Jayalal Sarma and K.S. Sunil. <i>On the Complexity of L-Reachability</i>. Fundamenta Informaticae. 145 (2016) 471483 • International Conferences <ul style="list-style-type: none"> • Julien Joseph Thomas, Vishnu Suresh, Muhammed Anas, Sayu Sajeew, and K. S. Sunil Programming with Natural Languages: A survey. <i>4th International conference on Computer Networks and Inventive Communication Technologies (ICCNCT 2021)</i> • K. S. Sunil and P. Sunilkumar. <i>Answer Book Valuation Using Semantic Similarity</i>. Annual International Conference on Emerging Research Areas on "Computing and Communication Systems for a Fourth Industrial Revolution"(AICERA 2020) 14th-16th December 2020, Kanjirappally, India 	

- Vidhya Ramaswamy, Jayalal Sarma, and **K. S. Sunil**. Complexity of Reachability Testing in Labelled Graphs. *11th International Conference on Language and Automata Theory and Applications, LATA 2017, Umea, Sweden, March 6-9, 2017*
- Balagopal Komarath, Jayalal Sarma and **K.S. Sunil**. *Comparator Circuits over Finite Bounded Posets* The 42nd International Colloquium on Automata, Languages, and Programming (ICALP 2015) July 6-10, 2015. Kyoto, Japan.
- Balagopal Komarath, Jayalal Sarma and **K.S. Sunil**. *On the Complexity of L-Reachability* Descriptive Complexity of Formal Systems (DCFS), August-2014, University of Turku, Finland.
- Kamala Krithivasan and **K.S. Sunil** *Tree Insertion Systems*. Foundations of Computer Science-2011. Las Vegas, USA.

ACHIEVEMENTS

- Secured First rank in the examination for the post of Lecturer in Computer Engineering in Technical Education Department (Polytechnics) conducted by Kerala Public Service Commission (Cat. No. 212/2009 - Ranked List No. 180/2015/SSVI).
- Qualified UGC NET (Computer Science and Applications) in 2014.
- Recognized as an outstanding Teaching Assistant in the Department of Computer Science and Engineering at IIT Madras for the courses:
 - CS1100 - Computational Engineering in the semester Jan - May 2013.
 - CS2200 - Languages Machines and Computations in the semester Jan - May 2013.
 - CS6030 - Mathematical Concepts for Computer Science in the semester July - Dec 2012.
 - CS1100 - Computational Engineering in the semester Jan - May 2012.
- Selected as the Best Faculty in Amal Jyothi College of Engineering., Kanjirappally in 2009.
- Selected as the Best Faculty in the Department of Computer Science and Engineering., Amal Jyothi College of Engg., Kanjirappally in 2008.

POSITIONS HELD

- Member, Syllabus vetting committee, Diploma Curriculum Revision 2021.
- Convenor, IEEE international conference ICCISc2021.
- National Knowledge Network Co-ordinator at GEC Idukki.
- Advisory Board Member of the National Conference on Emerging Computer Applications (NCECA-19), organized by the Department of Computer Applications, Amal Jyothi College of Engineering, Kerala, on May 15, 2019.
- Placement and Training co-ordinator at Government Polytechnic College Pala, Kottayam. July 2017 - March 2020
- Spoken Tutorial co-ordinator at Government Polytechnic College Pala, Kottayam. July 2017 - March 2020
- Program Committee Member of the Fifth International Conference on Advances in Computing and Communications (ACC-2015)
- Department Consultative Committee (DCC) PhD representative, Department of Computer Science and Engineering, IIT Madras. July 2014 - July 2015
- Sub-reviewer of Foundations of Software Technology and Theoretical Computer Science (FSTTCS-2014) organized by Indian Association for Research in Computing Science.
- Course co-ordinator for the Workshop on Software Development Techniques for Teachers of Engineering and Science Institutes (FOSSEE), organized by IIT Bombay at Amal Jyothi College of Engineering, Kanjirappally, Kottayam. November 5th, 2011 to December 4th, 2011
- Spoken Tutorial co-ordinator at Amal Jyothi College of Engineering, Kanjirappally, Kottayam. July - Dec 2011

TALKS GIVEN

- *Research in Theoretical Computer Science: Challenges and Opportunities* on 21-11-2020 organized by SAINTGITS College of Engineering, Kottayam, Kerala.
- *Career Guidance and Placement Opportunities* on 29-11-2020, organized by Government Polytechnic College Pala, Kottayam, Kerala.

TRAININGS/WORKSHOPS
ATTENDED

- Attended the two weeks Induction Program for newly recruited teachers of Polytechnics at National Institute of Technical Teachers Training and Research - Ernakulam (NITTTR-ECK), Kalamasseri during June 11-23, 2018.
- Attended the 47th Annual National Convention of ISTE at SaintGITS College of Engineering, Kottayam, Kerala, during Jan 27-29, 2018.
- Attended the Special Program for Training Managers of Polytechnics at National Institute of Technical Teachers Training and Research (NITTTR), Chennai during Sept 26-27, 2017.
- Attended Coordinators' Workshop on Software Development Techniques for Teachers of Engineering and Science Institutes at IIT Bombay during Sept 17-18, 2011.
- Attended the Teaching Assistant Training Programme-2012 conducted by the Mission 10X, WIPRO Technologies, Bangalore along with Teaching Learning Centre core team, IIT Madras during Feb 2-4 2012, at IIT Madras.
- Attended a Two-week ISTE workshop on Database Management Systems conducted by IIT Bombay, at NIT Calicut during Dec 13-23 2010.
- Attended the NPTEL Workshop conducted by the National Programme on Technology Enhanced Learning, IIT Madras on July 8 2010 at IIT Madras.