Ajeesh Ramanujan

My Erdos number is 3 (Gheorghe Păun → Solomon Marcus → Paul Erdős)

CONTACT INFORMATION	Assistant Professor Department of CSE College of Engineering, Trivandrum *Mobile:* (91) 9495135213 Trivandrum, Kerala–695016 *E-mail:* ajeeshramanujan@gmail.com

RESEARCH INTERESTS

- Formal Languages and Automata Theory
- Unconventional Modes of Computation
- Algorithms and Complexity Theory
- Theoretical Accepts of Machine Learning

EDUCATION

Indian Institute of Technology, Madras, Chennai, India

Ph.D., Computer Science and Engineering, February 2014

- Dissertation Topic: "CONTROL LANGUAGES IN P SYSTEMS"
- Advisor: Prof. Kamala Krithivasan

Cochin University of Science and Technology, Kochi, India

M.Tech., Computer and Information Science, May, 2003

LBS, Kasaragod (Calicut University), Kasaragod, India

B.Tech., Computer Science and Engineering, Dec, 1999

ACADEMIC EXPERIENCE

Amrita Institute of Technology, Kollam, India

Lecturer   **May, 2004 - May, 2005**

Taught undergraduate level course for the B.Tech in Computer Science and Engineering .

Government Engineering College, Palakkad, India

Lecturer   **June, 2005 - Dec, 2008**

Taught undergraduate level course for the B.Tech in Computer Science and Engineering .

IIT Madras, Chennai, India

Graduate Student   **Jan, 2009 - Dec, 2013**

Includes Ph.D. research, Ph.D. and Masters level coursework and teaching assistant for under graduate and graduate level courses.

Government Engineering College, Palakkad, India

Assistant Professor   **Jan, 2014 - June 2017**

Teaching undergraduate level course for the B.Tech in Computer Science and Engineering and graduate level course for M.Tech in Computational Linguistics.

College of Engineering, Trivandrum, India

Assistant Professor   **July, 2017 - present**

Teaching undergraduate level course for the B.Tech in Computer Science and Engineering and graduate level course for M.Tech in Computer Science and Engineering and Information Science.

PUBLICATIONS   Deepa C A, Reghu Raj P C and Ajeesh Ramanujan, Relation Extraction Using Deep Learning Methods - A Survey, ICTACT Journal on Soft Computing, 9(3), 1893-1902, 2019.

Atulya K Nagar, Ajeesh Ramanujan and K G Subramanian, Control Words of String Rewriting P Systems, International Journal of Advances in Engineering Sciences and Applied Mathematics, 10(3), 230–235, 2018.

Kamala Krithivasan, Gheorghe Păun and Ajeesh Ramanujan, On Controlled P systems, Fundamenta Informaticae 131, 451–464, 2014.

Ajeesh Ramanujan and Kamala Krithivasan, Control Languages associated with Spiking Neural P Systems, Romanian Journal of Information Science and Technology, 15(4), 301–318, 2012.

Kamala Krithivasan, Gheorghe Păun and Ajeesh Ramanujan, Control words associated with P systems, Frontiers of Membrane Computing: Open Problems and Research Topics by M. Gheorghe, Gh. Paun and M. J. Perez-jimenez - editors, Int. J. Fountations of Computer Science, 24(5), 568–569, 2013.

Kamala Krithivasan, Ajeesh Ramanujan, On The Power Of Distributed Bottom-up Tree Automata, Int. J. of Advanced Computer Science, 3(4), 184-190, 2013.

CONFERENCE   Ajeesh Ramanujan and Blesson Andrews Varghese, Internet Censorship Based on Bayes Learning
PRESENTATIONS   Model, Proceedings of the Second International Conference on Networks and Advances in Computational Technologies. Transactions on Computational Science and Computational Intelligence, 49-60, 2021.

Vinitha M Rajan and Ajeesh Ramanujan, Architecture of a Semantic WordCloud Visualization, Proceedings of the Second International Conference on Networks and Advances in Computational Technologies. Transactions on Computational Science and Computational Intelligence, 95-106, 2021.

Ajeesh Ramanujan and Blesson Andrews Varghese, A Survey on DDoS Prevention, Detection, and Traceback in Cloud, Proceedings of the Second International Conference on Networks and Advances in Computational Technologies. Transactions on Computational Science and Computational Intelligence, 69-82, 2021.

Deepa C A, Reghu Raj P C and Ajeesh Ramanujan, Relation Extraction across sentences using Bi-directional Long Short Term Memory Networks, 2020 International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE), 1-6, 2020.

Deepa C A, Reghu Raj P C and Ajeesh Ramanujan, Improving Relation Extraction Beyond Sentence Boundaries Using Attention, In the proceedings of International Conference on Computational Sciences-Modelling, Computing and Soft Computing (CSMCS 2020).

Krishnaprasad P and Ajeesh Ramanujan, Natural language generation using rst with morphology learning using factorized word vectors, accepted for presentation in the 7th National Conference on Indian Language Computing (NCILC-2017) held at CUSAT, 2017.

Krishnaprasad P, Sooryanarayanan A and Ajeesh Ramanujan, Malayalam text summarization: An extractive approach, Proceedings of the International Conference on Next Generation Intelligent Systems (ICNGIS), 1-4, 2016.

Krishnaprasad P and Ajeesh Ramanujan, Ramanujan sums based image kernels for computer vision, Proceedings of International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), 835-839, 2016.

Ajeesh Ramanujan, Kamala Krithivasan and Vipin Vasu A V, On Control Languages of Spiking Neural P Systems with Anti-spikes, Proceedings of the Third Asian Conference on Membrane Computing (ACMC), which will be held in Karunya University, Coimbatore, India, September 18-19, 2014.

Ajeesh Ramanujan and Kamala Krithivasan, Control languages associated with tissue P systems, Proceedings of the Twelfth International Conference on Unconventional Computation and Natural Computation 2013, Milano, Italy, Lecture Notes in Computer Science, 7956, 186-197,2013, Milan, Italy, July 1–5, 2013.

Ajeesh Ramanujan and Kamala Krithivasan, Control Words of Transition P Systems, Proceedings of Seventh International Conference on Bio-Inspired Computing: Theories and Applications (BIC-TA 2012), Advances in Intelligent Systems and Computing, 201, 145-155, 2013.

Kamala Krithivasan, Gheorghe Paun and Ajeesh Ramanujan, Control words associated with P systems, Frontiers of Membrane Computing: Open Problems and Research Topics by M. Gheorghe, Gheorghe Păun and M. J. Pérez-Jiménez - editors, published in the second volume of the proceedings of 10th Brainstorming Week on Membrane Computing, Sevilla, 171-250, 2012. Also published in Int. J. Fountations of Computer Science, Volume No.24(5), 568–569, 2013.

Kamala Krithivasan and Ajeesh Ramanujan, Matrix Representation of Spiking Neural P Systems with Delay, Proceedings of the Twelfth international conference on membrane computing, France, 283-298, 2011.

INTERACTIONS WITH OUTSIDE WORLD	- Acted as a reviewer for the journal "Journal of Membrane Computing". - Presented the project titled "Image Super Resulation" at the final round of 7th CSI-InApp National Student Project Awards 2018 held on 28-29 April, 2018 at Trivandrum, Kerala. - Acted as a resource person for an FDP on Algorithms in Machine Learning conducted by the Department of Computer Science and Engineering, CET from 18-22 December, 2018. - Acted as a reviewer for the 13th International Conference on Unconventional Computing and Natural Computation held at University of Western Ontario, London, Ontario, Canada, July 14-18, 2014. - In the technical program committee of the International Conference on Computing, Communication and Signal Processing conducted by College of Engineering Karunagapply in July 8-9, 2016. - Acted as a resource person for an FDP on Natural Language Processing and Machine Learning conducted by CSE Department of Vidhya Academy of Science and Technology in September 2016. - Acted as a question paper setter for Kerala University, Calicut University and Kannur University.
POSITIONS HELD/OTHER RESPONSIBILITIES	- TEQIP-II R&D Coordinator, GEC Palakkad from January 2014 to June 2017. - Skill Development Platform Kerala nodel officer. - Faculty Advisor, 2016-2020 UG Computer Science and Engineering Batch, CET. - TrEST research park advisory committee member. - Member CET center for International Relations. - PG Coordinator, GEC Palakkad from August 2014 to June 2017.

PROGRAMS COORDINATED	

PROGRAMS COORDINATED

- National Conference titled "National Conference on Computational Linguists and Information Retrieval (NCCLIR 2014) held at GEC, Palakkad from December 29-31, 2014.
- Visiting Faculty Programme on "Orchestrating Microservices Using Containers in Cloud" by Mr. Jay Kumar, Cloud Solution Architect, Microsoft, USA, 04-07-2018 at CET.
- FDP on "Basis of Computational Complexity Theory", January 14-16, 2015 at GEC Palakkad.
- A three day research talk on "Advances in Distributed systems" at GEC Palakkad from 31-03-2016 to 02-04-2016.
- Visiting Faculty Programme on "Research Guidance: How to read, write and present a research paper" by Vaskar Raychoudhury, Assistant Professor, IIT Roorkee at GEC Palakkad on 02-04-2016.

PROGRAMS ATTENDED

- Workshop on "Outcome Based Learning" conducted by Engineering Staff College of India held at College of Engineering Trivandrum from 10-11 June 2019.
- Pedagogical Training conducted by Teaching Learning Center, IIT Madras from 18-20 January 2016.
- FSDP on "Advanced DSP and Applications", conducted by Department of ECE, GEC Palakkad from January 30 - February 2, 2017.
- FSDP on "Advanced Digital Signal Processing", conducted by Department of ECE, GEC Palakkad from 22-24 February, 2016.
- Workshop on "Core Java" conducted by Department of CSE, GEC Palakkad from 5-7 November, 2014.

SUBJECTS ENGAGED

- Theory of Computation - For CSE Undergraduates.
- Design and Analysis of Algorithms - For CSE Undergraduates.
- Compiler Design - For CSE Undergraduates.
- Graph Theory and Combinatorics - For CSE Undergraduates.
- Computational Geometry - For CSE Undergraduates.
- Mathematical Foundations for Computational Linguistics - For CSE M.Tech students.
- Machine Learning - For CSE M.Tech students.
- Advanced Data Structures and Algorithms - For CSE M.Tech students.

PHD ADVISEES

Scholar Name	Place of Research	Scholar Type	Type of Guideship
DEEPA C A	GEC Palakkad	Full time scholar	Cosupervisor
ASWATHY M R	GEC Palakkad	Part time scholar	Cosupervisor
NEENA RAJ N R	CET	Full time scholar	Cosupervisor
SYCHANDRAN S	CET	Full time scholar	Cosupervisor
LINJU LAWRENCE	CET	Full time scholar	Cosupervisor

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Indian Society for Technical Education (ISTE) lifetime member (53983).

VIDEO COURSES

- Graph Theory and Combinations.
  Playlist Video link: `https://www.youtube.com/playlist?list=PLfC_fEdpdRYj9YKm2HpZuV9dZNcIMjQ0`