

SIJU K. S

Faculty in Mathematics

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PROFILE

Faculty member in Department of Mathematics, Saintgits College of Engineering (Autonomous), Kottayam. Handling classes in pure & Applied Mathematics, and presently serving as a Resource Person for the AI & ML course offered by IIT Madras and Gov. of Kerala. Serving as Data Analysis and Analytics consultant for Finance, Economics, Social Sciences and Engineering.

As a part of the professional life, I have over 18 years of experience in Teaching that involved Undergraduate, Graduate, Post Graduate and Professional courses in Science, Engineering & Technology.

During my stint at computational mathematics, I have trained myself with ToTs from prominent institutes like IIT(M), Intel, and ASDC (Gov. of Kerala) in modern technologies like Machine Learning, Deep Learning, Reinforcement Learning and Business Analytics. Currently handling skill training related to Research, AI and Analytics services of research scholars.

I led many FDPs and STTPs in Applied and Computational Mathematics, Artificial Intelligence & Machine Learning and Quantum Computing.

KEY ACHIEVEMENTS

Academic Area

- First Rank in B.Sc. (Mathematics) from Mahatma Gandhi University
- Best Project Proposal Award from RACCS, St. Thomas College, Palai
- Scholarship for Post Graduation in Mathematics from National Board for Higher Mathematics
- Fourth Rank in M.Sc.(Mathematics) from Mahatma Gandhi University
- IUCEE certified teaching faculty through International Engineering Educators Certification Program
- Resource person for AI& ML programme offered by Gov. of Kerala with the technical support of IIT, Madras.
- Board of Studies Member (2022-2023), Assumption's College (Autonomous), Changanachery.
- Mentor for AI&ML development and deployment, Intel-unnati programme

Recent Works in Automation & Content Development

- Web based Lab Manual for the course 20IMCAL204- Statistics Lab
https://bookdown.org/siju_swamy/Stat_Lab/
- Dashboards for Research Data Analysis
https://sijuswamy.shinyapps.io/Arya_Descriptive_Dashboard/ (Sample)
- Automation of Student Satisfaction Survey data analysis (for IQAC)
- Random Exam Generation using question banks
- Certificate Generation suit

JOURNEY

SAINTGITS College of Engineering (Autonomous)

Associate Professor

Since July 2010

Assistant Professor

July 2006–June 2010

Kuriakos Elias College

Lecturer

Aug 2004 – July 2006

DOMAIN

Pure Mathematics DS ML RL
AI Applied Mathematics
Applied Statistics Business Analytics
Computational Statistics Automation

SKILLS

Coding skills Research Data Analysis
Professional Teaching

LANGUAGES

English
Hindi
Malayalam



EDUCATION

B.Ed in Mathematics

MGU, Kottayam

Jun 2003 – June 2004

M.Sc in Mathematics

MGU, Kottayam

Jun 2001 – June 2003

B.Sc in Mathematics

MGU, Kottayam

August 1998 – June 2001

- Course-outcome target fixation process automation and data analysis (for IQAC)

Recent FDPs/STTPs as Resource Person

1. Milestones in the growth of Artificial Intelligence, introductory session during the Campus Visit programme of Excelsior English Schools Organized by IEDC & Bodhisattwa on 20 September, 2023.
2. R Programming Workshop, one day workshop organized by Department of Computer Applications, SCAS, Kottayam on 16 September, 2023.
3. Applications of AI Tools in Teaching and Learning, one-day Workshop organized by Alphonsa College, Palai, on July 21, 2023.
4. Introduction to ChatGPT- Evolution, Promises & Limitations (Technical session), 2 day national seminar - ChatGPT: Unveiling its multifaceted impact on religion, education and society, organized by IQAC, Mar Augusthinose College, Ramapuram and sponsored by IISR, New Delhi in collaboration with MG University, Kottayam from 29 June, 2023 to 30 June 2023.
5. A Modern Approach to Research Methodology, 3 day FDP organized by Department of Computer Science, Ilahia College of Engineering and Technology, Muvattupuzha from 8 January, 2023 to 10 January, 2023.
6. Computational Mathematics for Robotics, 2 day FDP organized by Department of Electronics & Communication Engineering, Saintgits College of Engineering (Autonomous), Kottayam from 6 February, 2023 to 7 February, 2023.
7. Data Analytics, 5 day FDP organized by Department of Computer Science, Sree Budha College of Engineering and Technology, Pattoor from 1 February, 2023 to 5 February, 2023.
8. PyWorks 1.0- Python for Engineers, 3 day FDP organized by Department of Artificial Intelligence & Data Sciences, Ilahia College of Engineering and Technology, Muvattupuzha from 25 January, 2023 to 28 January, 2023.
9. Applications of Big Data Analytics and cloud Computing Techniques in Smart Grid Energy Management, APJ KTU Sponsored Faculty Development Programme organized by Department of Electrical & Electronics, Saintgits College of Engineering (Autonomous) from 16 January, 2023 to 20 January 2023.
10. Mathematics for Machine Learning', by Department of Computer Science, GCET, Bengaluru on 7 January, 2023.
11. AI& ML Developer Programme, Certificate programme offered by Gov. Of Kerala with the technical support of IIT Madras and IIT Palakkad, Started on 22 December, 2022.
12. Workshop on Staistical Methods for Food Engineers, by Department of Food Technology, Saintgits College of Engineering (Autonomous), Kottayam on 23 November, 25 November and 30 November, 2022.
13. Fundamentals of Data Analytics Using R Programming, One day workshop organized by Department of Computer Science & Engineering, Ilahia College of Engineering & Technology in association with IEEE & CSI on 29 November, 2022.
14. Need and significance of Computational Mathematics , interactive demonstration organized by Department of Mathematics, Baselius College, Kottayam on 16 November, 2022.
15. Foundations of Applied Mathematics, KTU Bridge programme for B.Tech Students, organized by Gov. Engineering College (RIT), Kottayam on 5 November, 2022.
16. Artificial Intelligence and Data Analytics for Electrical Engineering Applications, one day workshop organized by Department of Electrical & Electronics Engineering, Sree Budha College of Engineering, Pattoor on 27, October 2022.
17. Artificial Intelligence & Data Science for Mathematics Tribe, one day workshop organized by Department of Mathematics, Assumption Autonomous College, Changanachery on 17 September, 2022.
18. Artificial Intelligence & Applications, AICTE sponsored six days STTP organized by Marian College of Engineering, Thiruvananthapuram from 20 August, 2022 to 3 September, 2022.
19. Data Analytics Using R, One day workshop organized by Sree Budha College of Engineering, Pattoor on 22 July, 2022.
20. Significance of Computational Mathematics in Engineering & Applications, Invited Lecture organized by Shree Ramdeobaba College of Engineering and Management , Nagpur on 9 April, 2022.
21. Research Methodology and Effective Tools for Academic & Research Documentation, Five Days FDP organized by SSN College of Engineering, Chennai from 7 March, 2022 to 11 March, 2022.
22. Mathematical Foundations of Machine Learning, Five Days AICTE Sponsored ATAL FDP organized by Sree Budha College of Engineering from 22 November, 2021 to 26 November, 2021.
23. Artificial Intelligence & Applications, Six Days AICTE Sponsored FDP organized by Marian College of Engineering from 26 to 31 July, 2021.
24. Deep Learning & Neural Networks, Five days FDP organized by Department of Electronics& Communication Engineering, Mohandas College of Engineering, Thiruvananthapuram from 5 to 9 July, 2021.
25. Python Programming Workshop Organized by the Bell Institute of Research & development Studies from 15 to 29 May, 2021.
26. Hands-on-Training in Deep learning, Workshop organized by Department of Computer Science, College Of Engineering, Vadakara from 18 to 20 March, 2021.

27. Mathematical Foundations for Machine Learning, Six days KTU sponsored FDP organized by Department of Computer Science & Engineering, Sree Budha College of Engineering from 22 to 26 March, 2021.
 28. Artificial Intelligence for Physics, Webinar organized by St. Xaviers' College for Women, Aluva on 10 March, 2021.
 29. Open Doors of AI to the Power Systems, FDP conducted by Kerala Gov.Polytechnic College, Kozhikkod on 27 November 2020.
 30. Python for Signal processing, Six Days FDP Organized by Department of ECE, Gov. Engineering College, Kannur, Kerala from 18 th January, 2020 to 23 rd January, 2020.
 31. Deep Learning Using Python, Six Days FDP Organized by Department of AE&I, Gov. Engineering College, Kozhikkod, Kerala from 13 th January, 2020 to 18 st January, 2020.
 32. Workshop on Python Programming, two days workshop organized by College of Engineering, Vadakara from 11 February 2020 to 12 February 2020.
 33. Analytical Foundations of Artificial Intelligence, Two Days Workshop Organized by Department of Mathematics, Assumption Autonomous College, Changanachery, Kerala from 1 st December, 2019 to 2 nd December, 2019.
 34. Hands-on Session on Predictive Analysis Using R,- AICTE Sponsored FSDT, Organized by Department of Computer Applications, SAINTGITS College of Engineering, Kottayam, Kerala on 16 th October, 2019.
 35. Reinforcement Learning, IIT Madras Certification Programme by Gov.Of Kerala from 12 August 2020 to 30 November 2020.
 36. Statistical Methods in Machine Learning & Deep Learning, IIT Madras Certification Programme by Gov.Of Kerala from 27 th January 2019 to 25 th July, 2020.
 37. Introduction to Applied Mathematics- KTU Foundation Programme, Organized by Gov. College of Engg., Kalluppara, Kerala on 8 th August,2019.
 38. Introduction to Applied Mathematics- KTU Foundation Programme, Organized by Gov. College of Engg., Munnar, Kerala on 5 th August, 2019.
 39. Numerical Optimization & Probability for Machine Learning, Two Days Workshop Organized by Gov. College of Engg., Kalluppara from 6 th July,2019 to 8 th July , 2019.
 40. Mathematical foundations of Machine Learning & ML models , IIT Madras Certification Programme by Gov.Of Kerala from 27 th January 2018 to 25 th July, 2019.
 41. Scientific Computing for Mathematics Graduates, One Day Workshop Organized by Department of Mathematics, Al-Ameen College, Edathala, Kochi, Kerala on 19 th February, 2019.
 42. Mathematical Modelling & Optimization of systems, Organized by FSDT Organized by Gov.Engg. College, Kannur from 17 th January, 2019 to 18 th January, 2019.
 43. Research Methodology & Data Analysis through SPSS, One Day Workshop Organized by Saintgits College of Applied Sciences on 6 th December, 2018.
 44. Review on Random Process & Markov Models, Two Days Workshop Organized by Department of ECE, MBC College of Engineering, Idukki, Kerala from 3 rd December, 2018 to 4 th December, 2019.
 45. Research Data Analysis Using R, Two Days Workshop Organized by Research and PG Department of Commerce, K.G. College Pampady. Sponsored by M.G. University, Kottayam from 31 November, 2018 to 1 st December, 2018.
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