Curriculum Vitae



Dr. UNNIKRISHNAN T.

Assistant Professor
Department of Statistics
Sree C. Achutha Menon Government College, Thrissur
Mobile: 9400839525

 ${\it E mail Id: unnik rish nant@kvasu.ac.in, unnik rish nan@govt collegethr is sur.ac.in}$

Date of Joining: (i) In Collegiate Education Service : (ii) Previous service if any (Specify service type and period of service) :	24-11-2018 FN 10-05-2010 FN to 31-03-2011AN Research Fellow, Kerala Forest Research Institute. 01-04-2011FN to 13-01-2014 FN Assistant Professor, Department of Statistics, Kerala Veterinary and Animal Sciences University. 13-01-2014 FN to 23-11-2018 Village Extension Officer, Department of Rural Development.
Experience details (UG and PG in Years)	UG 2 year, PG 4 years
Qualification (Degree, PG, M.Phil, Ph.D, Others)	B.Sc. Mathematics (3 Year Course) PGDCA (1 Year Course) Jyothisha Vidya Visarad (3 year Diploma) M.Sc. Mathematics (2 Year Course) M.Sc. Agricultural Statistics (3 Year Course), certificate received after submission of Thesis. https://krishikosh.egranth.ac.in/handle/1/5810153809. Ph.D. (Statistics) from University of Calicut.
Area of interest (Broad)	Applied Statistics, Time Series Analysis, Design of Experiments, Genetic Statistics, Bio Assay, Number Theory, Graph Theory, Meteorology.

Field of interest (Narrow)	Astrometeorology, Forecasting Models, Diophantine Equations, Primality Testing, Fermat's Last Theorem.
Field of Research	Non Parametric Analysis of Meteorological data.
Guide ship details	Nil
Courses handled (UG)	Statistical Methods, Probability Theory, Statistical Inference, Applied Statistics, industrial Statistics, Operation Research, Mathematical Analysis.
Courses handled (PG)	Time Series, Genetic Statistics, Design of Experiments, Modern Probability Theory, Sampling Theory, Bio Assay, Multivariate Analysis, Algebraic Number Theory, Real Analysis, Complex Analysis, Functional Analysis, Graph Theory, Differential Geometry, Practical Courses with Statistical Packages.
Academic Responsibilities Undertaken: (like participation in curriculum preparation, BoS, SSP, WWS, etc.)	Developed Software for Printing Revised Mark list of B.V.Sc. students of KVASU in 2013.
	Member in Publication Committee of KVASU in 2013.
	Member in Monitoring and Evaluation Committee of KVASU in 2013.
	Member in Green Protocol Committee of Victoria College, Palakkad in 2019.
	Convener, UG Admission Committee (Statistics), Sri. C. Achutha Menon Govt. College, Thrissur 2020.
	Member in Various Committees in Sri. C. Achutha Menon Govt. College, Thrissur 2020.
	Question Paper Setter for B.Sc. Degree of Kerala University.
	Question Paper Setter for B.Sc. (Forestry) Degree of Kerala Agricultural University.
	Question Paper Setter for Kerala Public Service Commission.
Office Charges held (like charges of clubs, NSS, NCC, etc.)	NSS Programme Officer from October 2019 onwards.

Extension Activities Undertaken:

Done Data Analysis for more than 100 research scholars all over India while working with KFRI and KVASU.

Produced a 30 minute shortfilm "Paadasparsham Kshamaswa" for awareness of Protection of Trees under the script of Sree Madambu Kunjukuttan in 2012 and telecasted through Doordarshan on 01.01.2013.

Script and Direction for the one hour documentary 'Aasayangal Aavishkaarathilekku" for KVASU. Which was released by Hon. Ministers of Animal Husbandry and Diary Science in 2013.

Script for the Short film for awareness of Grama Sabha, Released by Chief Minister in Presence of Chief Secretary and Education Minister in 2016.

Script for the Shortfilm on Awareness of Public Education in Kerala "Koottamani" which was released by Honourable Minister of Education in 2019. This film received award in a film festival in 2020.

Script for the shortfilm on Awareness of Waste Management "Sathpravruthikku Swathanthryam" which was released by Honourable Agricultural Minister of Kerala in 2019. This film bagged eight awards in a film festival in Kerala during 2020.

Script for the Shortfilm "Maamaram" produced by Govt. UP School Varadium, Thrissur which focus on awareness of planting trees in Students.

Script for the Documentary on Mathematics in Nature "Prakruthiyude Sukrutham" which was released by Dr. APJ Abdul Kalam, former President of India in 2008. I have received best script writer's award in a film festival by Kerala Film Audience Council. The film was shown in Kerala Government's Children Film Festival and received certificate for the producer.

Script for the documentary on my Mathematics Teacher Professor T. S. Balasubrahmanian, who attained 53 years of continuous teaching in a highly enthusiastic and funny way.

	A survey was conducted on waste management in Choondal Grama Panchayath and analysed the data. Given waste management equipments in 5000 houses in Choondal Gramapanchayath through a project.
	Helped in building houses for more than 150 poor families in Choondal Grama Panchayath by various housing schemes like IAY, PMAY and LIFE.
U.G.C Research Projects Undertaken: (Specify Major/ Minor ,Details of fund, title of project, period, status, etc.)	Nil
Non U.G.C Research Projects Undertaken: (Specify Funding Agency ,Details of fund, title of project, period, status, etc.)	Research Project as Co-investigator: Funding Agency : ICAR Category : Minor Project Details of Fund utilized: 2 Lakhs Title: Model for Prediction of Milk Price in Kerala Period of Project : 1 year Mercey, K.A., Unnikrishnan, T., Sethu Madhavan, T.P. and Justin Davis. 2013., Monograph submitted to KVASU as well as Governor of Kerala
Research Publications: (Details- title, journal details etc)	 i. International publishers : 1. Unnikrishnan, T. 2020., Models for forecasting the number of covid 19 cases in Indian States,
	 Current Medical Issues, 18(4):275-280. Unnikrishnan, T. Prasanth, C.B. and Ramya, M.S. 2020., Cointegrated movement of Covid cases with cured and deaths inKerala, Journal of Shanghai Jiaotong University, 16(7):417-423.
	3. Unnikrishnan T., Anilkumar, P. and Gopakumar, C.S. 2018.SARIMA models forecasting of weather parameters for Thrissur district, International Journal of Statistics and Applied Mathematics, 3(1): 360-367.
	4. Unnikrishnan T., Anilkumar P. and Siddique, K.H.M. 2017. Shift in date of onset of the southwest monsoon in India from 146 years of data exploring the change in distribution using non-parametric polynomial estimators. international Journal of Research in Applied Science & Engg. Technology. 5(12): 668-673.

- 5. Unnikrishnan T. 2013. Finding numbers satisfying the condition $A^n+B^n=C^n$, IOSR Journal of Mathematics, 7(4):01-03.
- 6. Unnikrishnan T. and Ajitha T.K. 2011. Planetary influence on Global warming, Proceedings of the International conference on the impact of climate change and food security, 3-5, March, pp. 306-308. (Proceedings with ISBN)
- 7. Mercey, K.A. and Unnikrishnan T. 2011. ARIMA and Cointegration Technique to Predict the Price of Egg in Kerala of the International conference on Stochastic Modelling and Simulation, 15-17, December, pp 199-202. (ISBN 978-81-8424-743-5).
- 8. Unnikrishnan T. and Ajitha T.K. 2011. Stochastic behavior of Pepper in Kerala, Proceedings of the International conference on Stochastic Modelling and Simulation, 15-17, December, pp 300-306 (ISBN 978-81-8424-743-5).
- 9. Unnikrishnan T. and GSLHV. Prasada Rao. 2009. Astrometeorology search for planetary influence on weather, Proceedings of the International conference on Climate Change Adaptation Strategies, 3-4, December, pp 39-42 (ISBN 978-81-7233-679-0).

ii. National

- 1. Morphometrical Changes in the Adrenal Glands of Kuttanad Ducks during Post Hatch Period, Journal of Veterinary and Animal Sciences, 46(2):49-52.
- 2. Unikrishnan, T. Mercey, K.A., Sethumadhavan, T.P. and Justin Davis, 2015. Model for prediction of Milk Price in Kerala, Journal of Veterinary and Animal Sciences, 46(1):42-45
- 3. Unikrishnan, T. 2013. Design of Experiments, Module VI, Training in SPSS, KVASU.
- 4. Unikrishnan T.,2013. Time Series Analysis for Livestock Meteorology, Fundamentals of Livestock Meteorology, Vol.1., Chapter 14. Ed. GSLHV Prasada Rao and Girish Varma., KVASU.

- 5. Pulari, S.R., Unnikrishnan, T. and Sunanda, C. 2014. Weather Forecasting and Astrometeorology, Astrological Magazine, Bangalore.
- 6. Unnikrishnan, T. and Ashok, B. 2012. Statistical Tools for Pricing Issues in Milk Production in Kerala. Journal of Indian Veterinary Association. (ISSN-0975-5195). pp.17-23.
- 7. Unnikrishnan T. and GSLHV. Prasada Rao. 2011. Astrometeorology – search for planetary influence on weather, Scientific Publishers (India), Ed. GSLHV Prasada Rao, pp 152-155.
- 8. Unnikrishnan T. and Ajitha T.K. 2010. *Application of ARIMA Models and Cointegration Techniques in Kerala Agriculture*, Proceedings of the national seminar on Interdisciplinary Applications in Statistics, Ed. Santhosh, S, 25-26, November. pp.130-143.
- 9. Unnikrishnan,T., Prasada Rao, G.S.L.H.V. and Ajitha T.K. 2009. Astrometeorology *in Agricultural Operations*, Proceedings of the national Workshop on Climate and Development, 29 June, pp1-7.
- 10. Unnikrishnan, T. and Ajitha T.K. 2009. *A Univariate Statistical approach to predict the onset of South West Monsoon in India*, Proceedings of the national Workshop on Climate and Development, 29 June, pp8-16.

Books Published: (Details- title, publisher details etc)

- 1. Unnikrishnan T. 2019. Ganitham Lalitham, Current Books, Thrissur, 216p.
- 2. Unnikrishnan T. 2018. Kusruthikkanakkukal, Black Bird Publishers, Thrissur, 96p.
- 3. Unnikrishnan T. 2011. *Programming with C*, (ISBN 978-81-8465-368-7), Soothradhara, 178p.
- 2. Unnikrishnan T. 2011. *Numerical Analysis*, 114p.
- 3. Unnikrishnan T. 2009. *Ganitham Engane Padikkam*, (ISBN 978-81-8465-367-0), Krishna Publishers, Thrissur, 186p.
- 4. Unnikrishnan T. 2008..*Programing with C and Numerical Analysis*, Soothradhaara, 292p.

Paper Presentations: (Details- title, venue, date etc)	1. Application of ARIMA Models and Cointegration Techniques in Kerala Agriculture National Seminar on Interdisciplinary Applications in Statistics, Maharajas College, Ernakulam, 25 and 26, November, 2010.
	2. Hidden Patterns of weather through Astrometeorology, National seminar on Forecasting Sciences, Thrissur, 28-30, January, 2012
	3. Dynamics of Cashew Production in Kerala, National seminar on Recent trends in Statistics and related areas, Calicut University,15-17, March, 2012.
	4. Shifting Njattuvelas and variability in onset of Southwest monsoon in India, International Seminar on Climate Change, Environment and Society, Sree Sankaracharya University of Sanskrit, Kalady, 29-30, March, 2017.
	5. Wind speed analysis across Thrissur, Central region of Kerala, National Seminar on Recent Trends in Climate Change and Carbon Research, Calicut University, 26-28, February, 2018.
	6. Coconut Projections over Kerala in future climate, National Seminar on Recent Trends in Climate Change and Carbon Research, Calicut University, 26-28, February, 2018.
	7. Variability in Climatic Patterns and Planning Agricultural Production, International Seminar on Climate Emergency: A call to Action Post Graduate Department of Economics, Sree C. Achutha Menon Government College, 21-22, November 2019.
Seminars / Workshops Organized: (Details-title, venue, date etc)	International Seminar on Applied Statistics in association with Department of Economics and Statistics, Thrissur on 19 th and 20 th October, 2020.
Seminars Attended: (Details- title, venue, date etc)	National Seminar on Linear models and Design of Experiments, Department of Statistics, Govt. College for Women, Thiruvananthapuram on 21-23, January, 2019.

Workshops Attended: As Resource Person(Details- title, venue, date etc)	"Statistics for Sustainable Development' - invited talk as resource person during Statistics day Celebrations conducted by Department of Economics and Statistics, Govt. of Kerala on 29 th July 2020.
	"Vedic Mathematics for fast mental calculations" in Orientation programme on Academic Leadership Conducted by Academic Staff College, KVASU from 11.02.2016 to 09.03.2016.
	"Principles of Vedic Mathematics" Two day National Seminar "Anantham Viswatho Mukham – Glimpses of Vedic Mathematics, conducted by Department of Mathematics, Bharatheeya Vidya Nikethan College of Teacher Education, Palakkad, 28-02-2020 and 29-02-2020.
Workshops Attended: As Participant (Detailstitle, venue, date etc)	Summer Workshop on Research Methodology and Application of SPSS for Data Analysis at Albertian Institute of Management, Cochin on 11,12 and 13 April 2008.
	One day Training in SPSS, Conducted by Directorate of Academics & Research, Kerala Veterinary and Animal Scienes University, 03.09.2013
	National Workshop on Mobile Application Development , Government Victoria College, Palakkad on 4 th and 5 th December 2019.
Refresher Courses Attended:	"A Road map to Enhance Core Teaching Competencies in academic Landscape", Conducted by Academic Staff College, KVASU from 14.02.2020 to 27.02.2020.
	"Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials", 18 days refresher Course (online), conducted by Indian Institute of Remote Sensing (IIRS), ISRO Dehradun, from 13-06-2020 to 01-07-2020 with Enrollment No. 202070010132821
	"Online bridge refresher course on Application of Population Genetics Concepts in Plant Breeding", 26 days Faculty Development Programme (online) conducted by University of Agricultural Sciences, Bangalore from 27-07-2020 to 21-08-2020.

Short Term Courses Attended:	Three day Residential Training on "Academic Leadership for Excellence" at Indian Institute of Management, Kozhikkode from 30-10-2012 to 01-11-2012. Three day residential Training on "Capacity Building Training for Teachers" of Collegiate Education Department of Kerala at Institute of Management in Government, Kochi from 11-02-2019 to 13-02-2019.
Long Term Trainings Attended	Passed with firstclass 6 Months Training in Extension training Centre, Mannuthy during 13.01.2014 to 14.07.2014 under the subjects: Rural Industries, Rural Engineering and Technology, Rural Economics and Planning, Rural Development Programmes, Community Development, Rural Sociology, Extension Education, Agriculture, Animal Husbandry, Cooperation, Panchayati Raj, Public health, Environmental Sanitation, Food and Nutrition etc.
Orientation Programmes Attended:	
Awards / Honours / Patents Conferred:	Invitation from His Excellency Dr. A.P.J. Abdul Kalam, Former President of India on 26 th September 2003 to meet him at Ernakulam during visit to Kerala, in connection with a partial proof to Fermat's Last Theorem submitted as per his advise to IISc and IMSc. Released a shortfilm "Prakruthiyude Sukrutham" under my script on Mathematics in Nature by Dr. A.P.J. Abdul Kalam, former President of India at Thrissur in 2008. Included a message from Dr. A.P.J. Abdul Kalam to my Documentary "Paadasparsham Kshamaswa" produced for protection of Environment
Webinars Organised	Seven day online NSS Camp "Haritham, Saphalam, Sundaram" for NSS volunteers of Sree C. Ahutha Menon Government College, Thrissur, which was LIVE for public through the youtube channel of Dr. Soni T.L., NSS Programme Officer. Seven Eminent guests of different disciplines were present each day.
Webinars attended	Two day National Level Webinar on "Research Methodology in Social Sciences" Conducted by Govt. College, Thripunithura, Ernakulam, 26&27, April 2020.

	Online Workshop on Moodle Platform named as "Learning Management System" Conducted by Sree Neelakanta Sarma Government Sanskrit College, Pattambi from 04.05.2020 to 14.05.2020. Seven day online course on "Online- Teaching, Learning for Beginners" conducted by KKTM Government College, Pulloot, Thrissur from 14.05.2020 to 21.05.2020. Two day online workshop on "Sample size determination using G-Power Software", conducted by Department of Statistics, St. Johns College, Agra on 23 and 24, May 2020.
Membership (s) in : Academic Bodies	NIL
Membership (s) in: NGOs, Cultural Organizations etc	Member, Vailoppilly Smaraka Samithi, Thrissur. Member, Sarggaswaram, Thrissur. Member, Jyothi – Jyothisha Samvadam, Thrissur.

Thrissur,

Unnikrishnan T.