Dr. Prity Kumari
Assistant Professor & Head

Dept. of Basic Science, College of Horticulture, Anand Agricultural University, Anand-388110, Gujarat, India

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http://www.aau.in/college-menu/department/faculty/15887

https://scholar.google.co.in/citations?user=C4L7BaQAAAAJ&hl=en

https://www.researchgate.net/profile/Prity_Kumari6

https://www.linkedin.com/in/dr-prity-kumari

Summary

Experienced Assistant Professor with demonstrated capabilities of working in the higher education. Research area of interest includes Time series forecasting using statistical models and Deep Learning AI which includes Autoregressive Integrated Moving Average (ARIMA), Autoregressive Conditional Hetroscedasticity (ARCH/GARCH), Artificial Neural network (ANN), Machine learning, Recurrent Neural network (RNN), Deep learning, Image processing and Convolution Neural Network (CNN).

Experience

Western Sydney University

Visiting Fellow
Feb 2023 – March 2023
NSW, Sydney, Australia

Anand Agricultural University

Assistant Professor
June 2015 - Present

Anand, Gujarat, India

State Finance Commission, Patna, Bihar
Consultant
October 2014 - June 2015 (9 months)

Patna, Bihar, India

Ministry of Statistics & Programme Implementation
Consultant
November 2013 - September 2014 (11 months)
New Delhi, India

Education

Banaras Hindu University
Ph.D. (Agricultural Statistics)
2009 - 2013

Dissertation Title:
Developing Statistical models (Time series like ARIMA & ANN) on Damage by Key Insect pests and production of pigeon pea in INDIA

G. B. P. U. Agriculture & Technology
Uttarakhand, India
M.Sc. (Agricultural Statistics)
2007 - 2009
Dissertation Title:
Comparison of different estimators in probability proportional to size (pps) sampling

Kumaun University
Uttarakhand, India
B.Sc. (PCM)
2004 - 2003

Research Schemes/Projects:

SN	Name of Project	PI/Co-PI	Funding Agency
1.	Establishing centre for Agricultural market Intelligence at A.A.U., Anand	Co-PI	National Agricultural Higher Educational project (**NHAEP-CASST**), **ICAR, New Delhi**

Honors/Awards/ Recognition:

Sr. No.	Awards/Medals/ Recognition	Organizing Institution/ University/ Agency	Year
1.	Invited as Session Chair	7th International Conference on Artificial Intelligence organized by IACSIT , Amsterdam, The Netherlands	2020
2.	Best paper presentation award	Indian Society of Agricultural Statistics, New Delhi	2018
3.	Innovation in Science Pursuit for Inspired research (INSPIRE) Fellowship	Department of Science and Technology, Govt. Of India	2010

Training/Seminar/Webinar/Workshop organized:

S No.	Title	Duration	Sponsoring Authority
1.	Smart Farming: Application of AI, Robotics, IoT & Cloud Computing	February 28th – March 04th 2022	ICAR, New Delhi and NHAEP-CASST, AAU, Anand, Gujarat, India
2.	Artificial Intelligence in Agriculture	February 02nd, 2021	
3.	Space technology & Machine Learning for Agriculture	Oct. 28-29, 2020	
4.	Research Methodology for Social Sciences	Sep. 1-11, 2020	
5.	Market analytics in R- Phase II	March 03-05, 2020	
6.	Market analytics in R- Phase I	Feb. 24-26, 2020	

Training/FDP/Certificate course/Webinar/Workshop Attended:

Sr. No.	Course/ Programme/FDP	Organization	Duration (days)	Time
1.	Internet of Things(IoT)	Eduxlabs in association with IIT Hyderabad, India	05	Nov. 22-27, 2021
2.	Deep Learning Computer Vision in Image & Video Ananlysis	Eduxlabs in association with IIT Hyderabad, India	10	Sep. 08-23, 2021
3.	Digital Tools for Writing, Authoring and Reviewing Manuscripts	EICT IIT Roorkee, India	10	July 12-23, 2021
4.	Google Earth Engine with Python for Climate Smart Agriculture	CAAST, NAHEP, MPKV Rahuri, Maharashtra, India	21	June 07-27, 2021
5.	Mobile Application Development for Agricultural World	IDP, NAHEP, G. B. P. U. A. & T., Pantnagar	15	May 20th – June 02nd,2021
6.	Data science for all	EICT IIT Roorkee, India	10	April 12-23, 2021
7.	Machine Learning & AI	Eduxlabs in association with IIT Hyderabad, India	10	March 18-28, 2021
8.	Computer Vision and Image Processing	EICT IIT Roorkee, India	10	December 14-24, 2020
9.	Artificial Intelligence (AI), Machine Learning and Deep Learning & its Application	EDUXLAB Gurugram, India	10	July 20-30, 2020
10.	AI for everyone	Coursera	30	July, 2020
11.	Modern statistical Techniques in Genetics	CAFT, IASRI, New Delhi	21	Feb. 01-21,2019
12.	Statistical Advances for Agricultural Data Analysis	CAFT, IASRI, New Delhi	21	March. 03-23, 2018

List of Research Papers

1. **Kumari P**, Goswami V, N. H, Pundir RS (2023). Recurrent neural network architecture for forecasting banana prices in Gujarat, India. *PLoS ONE* 18(6): e0275702. https://doi.org/10.1371/journal.pone.0275702

2. Harshith, N., **Kumari, Prity**. (2024). Memory based neural network for cumin price forecasting in Gujarat, India. Journal of Agriculture and Food Research. Available online 28 January 2024, 101020. Elsevier. https://doi.org/10.1016/j.jafr.2024.101020

3. Sathish Kumar M., **Kumari P.**, Maria S. and Teena L. B. (2024). Potato and potato seed production under contract farming- A study from empirical evidence of case studies, *Potato Research*, Accepted 6th Nov 2023.

4. Hebsale Mallappa, V. K., Panigrahy S. R., Nayak A. K., Pundir R. S. and **Kumari P.** (2023). Factors Influencing the Knowledge Level of Fish Consumers: An Explanatory Analysis, *Sustainability* 15(13), 10183. https://doi.org/10.3390/su151310183.

5. Mishra, P., Al khatib, A. M. G., Alshaib, B. M., Kuamri, B., Tiwari, S., Singh, A. P., Yadav, S., Sharma, D., & **Kumari, P.** (2024). Forecasting Potato Production in Major South Asian Countries: A Comparative Study of Machine Learning and Time Series Models. Published 18 January 2024. https://doi.org/10.1007/s11540-023-09683-z

6. Ray S., Mishra P., Ayad H., **Kumari P.**, Sharma R., Kumari Binita, Al Khatib A. M. G., Tamang A. and Biswas T.(2023). Prediction of Fruit Production in India: An Econometric Approach, *Journal of Horticultural Research*, 31(1):25-34. https://doi.org/10.2478/johr-2023-0005

7. Supriya, Srivastava A. B., Raghav Y. S., Devi M., **Kumari P.**, Yadav S., Mishra P., Gautam R., Gupta B. K., Verma S. K. and Bohra D. (2023). Modelling and forecasting of lentil production in India and its instability, *Journal of Animal and Plant Sciences*, 33 (4): 817:828.

8. **Kumari P.,** Parmar D. J., M. Sathish Kumar, Mahera A. B and Lad Y. A. (2022). Comparison of Statistical Models for Prediction Area, Production and Yield of Citrus in Gujarat, *Biological Forum – An International Journal*, 14(2): 540-545.

9. **Kumari P.,** Parmar D. J., M. Sathish Kumar, Mahera A. B and Lad Y. A. (2022). Evaluation of linear statistical models for predicting area, production and productivity of Sapota in Gujarat, *The Pharma Innovation Journal*, 11(5): 755-759.

10. **Kumari P.,** Parmar D. J., M. Sathish Kumar, Mahera A. B and Lad Y. A. (2022). Prediction of area, production and productivity of total fruit crops in Gujarat, The Pharma Innovation Journal, 11(5): 750-754.

11. **Kumari P.,** Parmar D. J., M. Sathish Kumar, Lad Y. A. and Mahera A. B (2022). An artificial neural network approach for predicting area, production and productivity of Banana in Gujarat, *The Pharma Innovation Journal*, 11(4):816-821.

12. **Kumari P.,** Parmar D. J., M. Sathish Kumar, Lad Y. A. and Mahera A. B (2022). Forecasting area, production and productivity of mango in Gujarat by using an artificial neural network model, *The Pharma Innovation Journal*, 11(4):822-826.

13. **Kumari P.,** Mishra G.C. and Srivastava C.P. (2021). Forecasting of Losses Due to Pod Borer, Pod Fly and Yield of Pigeonpea (Cajanus cajan) for Central Zone (CZ) of India by Using Artificial Neural Network, *Current Topics in Agricultural Sciences (B. P. International)*, 5: 68-78.

14. **Kumari P.,** Mishra G.C. and Srivastava C.P. (2021). Forecasting of Early Maturing Pigeonpea (Cajanus cajan) Yield for Central Zone (CZ) of India *Current Topics in Agricultural Sciences (B. P. International)*, 5: 134-139.

15. **Kumari P.** and M. Satish Kumar (2021). Forecasting area, production and productivity of citrus in Gujarat-An application of artificial neural network. *International journal of Agriculture Sciences*, 13(10), 10913-10916.

16. M. Satish Kumar and **Kumari Prity** (2021). Artificial neural network model for predicting area, production and productivity of sapota in Gujarat. *International journal of Agriculture Sciences*, 13(10), 10909-10912.

17. **Kumari P.,** Mishra G.C. and Srivastava C.P. (2018). Predictive models for pod damage by pod fly in pigeonpea for north east plain zone of India, Int. J. Agricult. Sci., 14(2):465-468

18. **Kumari P.** and Mishra G.C. (2018). Pod damage modeling and forecasting in early Maturing pigeonpea (cajanus cajan) for central zone (cz) of India, *The Bioscan,* 13 (2): 603-606.

19. **Kumari Prity**, Mishra G.C. and Srivastava C.P. (2016). Statistical models for forecasting pigeonpea yield in Varanasi region, *Journal of Agrometeorology* 18 (2): 306-310.

20. **Kumari P.,** Mishra G.C. and Srivastava C.P. (2017). Forecasting models for predicting pod damage of pigeonpea in Varanasi region, *Journal of Agrometeorology* 19 (3): 265-269.

Additional responsibilities (academic/administrative):
- ❖ Program Officer, NSS, College of Horticulture, AAU
- ❖ Asst. Rector (4 years), Common Girls Hostel, Anand Agricultural University, AAU
- ❖ Co-chairman (1 year), SRC, College of Horticulture, AAU
- ❖ Member, Board of Studies, College of Horticulture, AAU
- ❖ Member, Women Cell, College of Horticulture, AAU
- ❖ Member, Executive Council Body, Alumni Association, College of Horticulture, AAU
- ❖ Library In-charge, College of Horticulture, AAU
- ❖ IT Infrastructure Management In-charge, College of Horticulture, AAU
- ❖ Member Secretary, SSR preparation committee, College of Horticulture
- ❖ Member- Anti_Ragging Committee, College of Horticulture, AAU

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