Curriculum Vitae (CV)

Family Name	: Abd-Elrahman
Medial Name	: Mohamed
First Name	: Ayman
Current Employer	: Full time Professor
Address	: Dept. of Mathematics, Fac. of Science, Assiut Univ., Assiut 71516, Egypt
Gender	: Male
Date of Birth	: February 26, 1965
Place of Birth	: Assiut, Egypt
Nationality	: Egyptian
E-mail	: <ayman275@aun.edu.eg> (official) <ayman275@yahoo.com> (after permission only) <drayman30042019@gmail.com> (after permission only)
Phone	: 002 01013 674 689
Fax	: 002 0882 342708

Academic Positions

Professor (2025–) Full-time at Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt.

Associated Professor (2019–2024) Full-time at Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt.

Assistant Professor

– (2013–2019) Full-time Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt.

– (2006–2013) Full-time Department of Mathematics, College of Science, Al-Jouf University, 2014 Sakaka, Al-Jouf, Saudi Arabia.

– (2003–2006) Full-time Faculty of Education for Girls, Rafha, Saudi Arabia.

– (May 2001–2003) Full-time Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt.

Ph D. Scholarship holder (April 1997–2001) offered by " Österreichescher Akademischer Austauschdienst (ÖAD) Geschäftsstelle Wien, Aölkerbastei 16, A-1010 Wien, at Full-time at Department of Statistics and Probability Theory, Vienna University of Technology, Wiedner Hauptstraße 8–10, 1040 Wien, Austria.

Assistant Lecturer (April 1993–1997) Full-time at Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt.

Demonstrator (October 1986 – 1993) Full-time at Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt.

Academic Records

– B.Sc. in Mathematics (1983-1986), Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt, with grade "Distinction with honour", Joun 1986.

– Msc. in Mathematics (Statistics) (1987–1993), Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt. Thesis title: A comparative study of the choices of the smoothing parameters under optimal kernels, 1993.

– Ph. D. in Mathematical Statistics (1997–2001), Department of Statistics and Probability Theory, Vienna University of Technology, Wiedner Hauptstraße 8–10, 1040 Wien, Austria. Thesis title: Aspekte der Schließenden Statistik für unscharfe Daten (Aspects of Statistical Inference for Non–Precise Data), 2001. Doktor der Technishen Wissenschaften (Comparable to Doctor of Technical Sciences), Doctor technicae Dr. techn.

Areas of Interest

Nonparametric density estimation; Mixtures of distributions; Discriminant analysis; Bayesian analysis and Reliability; Distributions and Probability Theory; Statistical inferences for precise and non-precise data.

Publications

Research Papers Presented in Conferences (In English):

1. **Ayman M. Abd-Elrahman (2017).** Reliability estimation under Type-II censored data from the generalized Bilal distribution: a comparative study, presented in the: *International Conference on Mathematics, Trends and Development (ICMTD17), The Egyptian Mathematical Society, 28 30 DEC. 2017, Cairo, Egypt.* ID number: STA - 12.

2. **Ayman M. Abd-Elrahman**, Mohamad A. Mohamad **(2014)**. Estimation of mixed exponentiated Weibull parameters in life testing, *The 4th International Conference for Young Researchers*, Faculty of Science, Assiut University, Assiut, Egypt.

3. **Ayman M. Abd-Elrahman (2013)**. A new two-parameter lifetime distribution with bathtub, up-bathtub or increasing failure rate function, presented in *The 3rd International Conference on Mathematics & Information Science ICMIS* 28–30 December 2013, Luxor, Egypt.

4. **Ayman M. Abd-Elrahman**, Reinhard Viertl **(2000)**. Fuzzy Bayesian inference, 2000, presented during *the IDA 2000 Conference "International Data Analysis"* in Innsbruck, Austria.

5. **Ayman M. Abd-Elrahman (1999)**. On parametric inference for fuzzy data, published in *the proceedings of SAD '99 Conference "Statistical Data Analysis"* in September 1999, Wroclaw, Poland.

Research Papers Journals (In English):

6. **Ayman M. Abd-Elrahman (2018).** Reliability estimation under Type-II censored data from the generalized Bilal distribution, Accepted for publication in the *Journal of the Egyptian Mathematical Society*, on 18 December 2018.

7. **Ayman M. Abd-Elrahman**, Sherif F. Niazi **(2017).** Approximate Bayes Estimators Applied to the Bilal Model, Journal of the Egyptian Mathematical Society 25, (2017), 65–70.

8. **Ayman M. Abd-Elrahman (2016).** A new two–parameter lifetime distribution with decreasing, increasing or upside-down bathtub shaped failure rate, *Communications in Statistics: Theory and Methods* **46**(18), (2016), 8865–8880.

9. **Ayman M. Abd-Elrahman**, Sherif F. Niazi **(2016).** Bayesian prediction bounds of doubly Type-II censored samples for a new bathtub shape failure rate life time model, *Journal of Applied Mathematics and Statistical Sciences* **1** (2), (2016), 21–30.

10. **Ayman M. Abd-Elrahman**, Mohamad A. Mohamad **(2016).** Estimation of mixed exponentiated Weibull parameters in life testing, *International Mathematical Forum* **11** (16), 769–781.

11. **Ayman M. Abd-Elrahman**, Mohamad A. Mohamad **(2016).** Estimation of a non-linear discriminant function from a mixture of two exponentiated-Weibull distributions. *J. Math. Comput. Sci.* **6** (5), 907–921.

12. Sherif F. Niazi, **Ayman M. Abd-Elrahman (2015).** Bayesian Prediction Bounds for a Two-Parameter Lifetime Distribution with Bathtub-Shaped Failure Rate Function, SYLWAN 159 (6), (2015), 34–50.

13. **Ayman M. Abd-Elrahman (2015).** A New Subfamily for the Generalized Gamma Distribution: a new model with five different shapes for its failure rate function, *SYLWAN* **159** (6), (2015), 337 – 349.

14. **Ayman M. Abd-Elrahman (2014).** A new two-parameter lifetime distribution with bathtub, up-bathtub or increasing failure rate function, *Journal of Statistics Applications and Probability* **vol. 3**, pp. 21–32,

    URL http://dx.doi.org/10.12785/jsap/030103.

15. **Ayman M. Abd-Elrahman (2013).** Utilizing ordered statistics in lifetime distributions production: A new lifetime distribution and applications, *Journal of Probability and Statistical Science* **vol. 11** no. 2, pp. 153–164.

16. **Ayman M. Abd-Elrahman**, Khalaf S. Sultan **(2007)**. Reliability estimation based on general progressive censored data from the Weibull model: comparison between Bayesian and classical approaches, *METRON - International Journal of Statistics* **vol. LXV**, no. 2, pp. 1–19.

17. **Ayman M. Abd-Elrahman (2007).** Asymptotic variance-covariance matrix of the ML estimates based on general progressive censored data using EM algorithm, *Journal of Probability and Statistical Science* **vol. 5,** no. 2, pp. 171–185.

18. Khalf E. Ahmad, Hanem M. Moustafa, **Ayman M. Abd-Elrahman (1997)**. Approximate Bayes estimation for mixtures of two Weibull distributions under type-2 censoring, *Journal of Statistical Computation and Simulation* **vol. 58**, no. 3, pp. 269–285.

19. Khalf E. Ahmad, **Ayman M. Abd-Elrahman (1994)**. Updating a nonlinear discriminant function estimated from a mixture of two Weibull distribution, *Mathematical and Computer Modeling* **vol. 19**, no. 11, pp. 41–51.

20. **Ayman M. Abd-Elrahman** , Abd EL-Baset A. Ahmad and Marwa A. Younis **(2019)** " Estimation in constant-stress partially accelerated life tests for Burr Type XII using tampered random variable model under unified hybrid censoring data." : *Assiut University Journal of Multidisciplinary Scientific Research* **vol. 48** pp. 125-139.

21. **Ayman M. Abd-Elrahman**, **(2023)** A better Alternative to the Generalized Bilal distribution: a new model with five different shapes for its failure rate function and applications. *International Journal of Reliability, Quality and Safety Engineering* **vol. 30**, No. 6 20 pages.

22. Abdalla Rabie and **Ayman M. Abd-Elrahman**, **(2024)** Statistical Inference Using Partially Accelerated Life Test Model for the Weibull Population Mean Unified Hybrid Censored Data. *International Journal of Reliability, Quality and Safety Engineering* **vol. 31**, No. 3 (14 pages).

23. **Ayman M. Abd-Elrahman**, E. G. Sayed, **(2024)** The Classical Pair Distribution Function Using Bilal Distribution for One Component Plasma. *Aswan University Journal of Science and Technology.* **vol. 4**, pp. 1-16.

24. **Ayman M. Abd-Elrahman**, Marwa A. Younis, and Shereen A. Mohammed**(2024)** One-sample Bayesian prediction for unified hybrid censored data from the Burr XII distribution under constant-stress partially accelerated model *Applied Mathematics and Information Science (AIMS)* Accepted: 13 nov. 2024.

25. Manal G. Eldin, E. G. Sayed AND **Ayman M. Abd-Elrahman**, Marwa A. Younis, and Shereen A. Mohammed**(2024)** Classical Entropy and Distribution Functions for Relativistic Dilute Plasma *Journal of the Egyptian Mathematical Society* Accepted: 26 Dec. 2024.

Teaching

Universities: Assiut University; Cairo University Bani-Swief Branch; AL Minia University; South Valley University Sohag Branch; Al-Jouf University, 2014 Sakaka, Al-Jouf, Saudi Arabia.

Graduate Courses: Biostatistics, Faculty of Pharmacy and Faculty of Science, Assiut University, Assiut, Egypt; Simulation, Faculty of Science, Dept of Mathematics, Assiut University, Assiut, Egypt.

Undergraduate Courses:

Statistics: Biostatistics; Probability Theory; Statistical Distributions; Reliability / Survival Analysis; Regression Analysis; Mathematical Statistics; Applied Statistics; Elementary Statistics; Statistical Analysis Using Computer Packages (MS-Excel, Mathematica, Maple, and SPSS).

Computer Science: Introduction to Computer Science; Introduction to Microsoft Excel; Introduction to Microsoft Visual Basic; FORTRAN Language Programming; Basic Language Programming; C Language Programming; Algorithms.

Calculus: Differentiation and Integration, levels one and two.

Algebra: Levels one and two; Abstract Algebra.

Geometrical Analysis: Levels one and two; Geometric in 3D-Space.

Numerical Analysis: Levels one two; Operation research; Optimization.

Differential Equations: (ODE and PDE) Levels one and two.

Thesis Supervision:

1. M. Sc. (2001-2004): Ahmed Ali Mahyoub Al-Mujahid. On Statistical Inference for Non-Precise Data, M. Sc., 28 November 2004.

   Supervisors: Khalaf Al-Daba Ahmed, Ayman Mohammed Abd-Elrahman, Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt.

2. Ph. D., (2003–2006): Saieed Farag Abd Al-Galeel Ateya. A Class of Multivariate Distribution: Construction, Copulas and Inferences, Ph. D., 27 February 2006.

   Supervisors: Issam Khalaf Mohamed Khalaf Al-Husseini, Mahmoud Ibrahim Mahmoud Mohammed Abdel Karim, Ayman Mohamed Abd-Elrahman Mahmoud, Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt.

3. Ph. D. (2013-): Mohammed Atef Mohammed Abdallah. On Finite Mixture of the Exponentiated–Weibull Distributions.

   Supervisors: Prof. Dr. Khalaf E. Ahmad, Prof. Dr. Zainhom F. Jaheen and Dr. Ayman M. Abd-Elrahman, Department of Mathematics, Faculty of Science, Assiut University, Assiut 71516, Egypt.

Statement

I, the undersigned, certify that all information stated herein are true and correct. I am also available for any further information at any time.

Dr. Ayman Mohamed Abd-Elrahmabn