CURRICULUM VITAE AND PUBLICATIONS LIST

CURRICULUM VITAE

Name and Surname: GÜLCAN GENCER

Academic Title: Associate Professor

Work Address:

Email: gulcan.gencer@afsu.edu.tr

Foreign Languages Known (Score and Year):
English, C1 Advanced, 2025
English, C1 Advanced, 2021
English, C1 Advanced, 2017
English, C1 Advanced, 2017

Area of Expertise: Artificial Intelligence, Computer Learning and Pattern Recognition
Biostatistics and Medical Informatics

Degree	Department/Program	University	Year
Master's Degree	BİYOİSTATİSTİK (YL) (TEZLİ)	Eskişehir Osmangazi University	Continues
Doctorate	İSTATİSTİK (DR)	Selçuk University	2020
Master's Degree	İSTATİSTİK (YL) (TEZLİ)	Selçuk University	2016
Bachelor's Degree	İSTATİSTİK BÖLÜMÜ	Selçuk University	2011

Master's Thesis Title (abstract attached) and Thesis Supervisor(s):

Bazı dağılımlar için en çok olabilirlik ve farklı kayıp fonksiyonları altında Bayes tahmin edicilerinin performanslarının karşılaştırılması

Doctoral Thesis/Proficiency Study/Medical Specialization Thesis Title (abstract attached) and Supervisor(s):

Sansürleme altında Kullback-Leibler uyuşmazlığına dayalı uyum iyiliği testleri

Position Title	Workplace	Year
Assistant Professor	Afyonkarahisar Health Sciences University	2022-Continues

Roles in Projects:

1. *Astragalus melanophrurius'un Farklı Kısımları Üzerine Yapılan Fitokimyasal Bir Araştırma*, Project Supported by Higher Education Institutions, Gencer G., 2024-2024.

2. *Tıp Eğitiminde Probleme Dayalı Öğrenmenin Metaverse Ortamında Uygulanması ve Değerlendirilmesi*, Project Supported by Higher Education Institutions, Gencer G. (Executive), 2022-2023.

Administrative Duties:

1. Deputy Institute Director - Afyonkarahisar Health Sciences University (2025 - Continues)
2. Center Director - Afyonkarahisar Health Sciences University (2024 - Continues)
3. Other Academic Position - Afyonkarahisar Health Sciences University (2024 - Continues)

4. Chief Coordinator - Afyonkarahisar Health Sciences University (2023 - Continues)
5. Deputy Coordinator - Afyonkarahisar Health Sciences University (2022 - 2023)

PUBLICATIONS

A. Articles published in international peer-reviewed journals:

A1. Gencer K., Gencer G., Horozoğlu Ceran T., Er A., Doğan M., "Photodiagnosis with deep learning: A GAN and autoencoder-based approach for diabetic retinopathy detection", *Photodiagnosis and Photodynamic Therapy*, vol. 53, no. 104552, pp. 1-10, 2025.

A2. Gencer G., Gencer K., "Advanced retinal disease detection from OCT images using a hybrid squeeze and excitation enhanced model", *PLOS ONE*, vol. 20, no. 2, pp. 1-21, 2025.

A3. Gencer G., Gencer K., "Large Language Models in Healthcare: A Bibliometric Analysis and Examination of Research Trends", *Journal of Multidisciplinary Healthcare*, vol. 2025, no. 18, pp. 223-238, 2025.

A4. Gencer K., Gencer G., "Hybrid deep learning approach for brain tumor classification using EfficientNetB0 and novel quantum genetic algorithm", *PeerJ Computer Science*, vol. 11, no. 2556, pp. 1-27, 2025.

A5. Gencer G., Şensoy N., Gencer K., "Problem-based Learning in the Metaverse Environment: Evaluation of Virtual Reality Applications in Medical Education", *Journal of Learning and Teaching in Digital Age*, vol. 10, no. 2, pp. 109-121, 2025.

A6. Gencer G., Sarıkürkcü C., Tepe B., "Unveiling the Phytochemical Diversity and Bioactivity of Astragalus melanophrurius: A First Report Integrating Experimental and In Silico Approaches", *Pharmaceuticals*, vol. 18, pp. 103, 2025.

A7. Durusu Türkoğlu İ. N., Türkoğlu A. K., Soylu S., Gencer G., Çinar R., "A comprehensive investigation of biochemical status in patients with telogen effluvium: Analysis of Hb, ferritin, vitamin B12, vitamin D, thyroid function tests, zinc, copper, biotin, and selenium levels", *Journal of Cosmetic Dermatology*, vol. 23, no. 12, pp. 4277-4284, 2024.

A8. Gencer G., Gencer K., "A Comparative Analysis of ChatGPT and Medical Faculty Graduates in Medical Specialization Exams: Uncovering the Potential of Artificial Intelligence in Medical Education", *Cureus*, vol. 16, no. 8, pp. 1-9, 2024.

A9. Gencer G., Serin A. N., Gencer K., "Analysis of the effect of hashimoto's thyroiditis and insulin resistance on ovarian volume in patients with polycystic ovary syndrome", *BMC Womens Health*, vol. 23, no. 1, pp. 1-7, 2023.

B. Papers presented at international scientific meetings and published in proceedings:

B1. Akkoca E., Gencer G., Acar S., Emrem H. K., Erdoğan M., STATISTICAL ANALYSIS OF ENGAGEMENT METRICS INARTIFICIAL INTELLIGENCE–RELATED VIDEO CONTENT INDENTISTRY BASED ON CONTENT SOURCE, In: *11TH INTERNATIONAL ACHARAKACONGRESS ON MEDICINE, NURSING, MIDWIFERY, AND HEALTH SCIENCES*, Türkiye, 2025.

B2. Damgacı İ. S., Gencer G., Salar D., Taşdemir E., Kara E. D., STATISTICAL ANALYSIS OF ENGAGEMENT METRICS INYOUTUBE™ VIDEOS ON ORAL AND MAXILLOFACIAL SURGERY BASED ON CONTENT SOURCE, In: *11TH INTERNATIONAL ACHARAKACONGRESS ON MEDICINE, NURSING, MIDWIFERY, AND HEALTH SCIENCES*, Türkiye, 2025.

B3. Yıldız İ. E., Gencer G., Güllü F., Salman H. B., Oğuzcan A., Sabak S., Şanal A., DEMOGRAPHIC AND ENGAGEMENT-BASED ANALYSIS OF DENTISTRY VIDEOS RELATED TO 3D PRINTING TECHNOLOGY, In: *INTERNATIONAL SCIENTIFIC RESEARCH AND INNOVATION CONGRESS-III*, Azerbaijan, 2025.

B4. Başalan E., Gencer G., Çaprak E., Kurt B., Başaran R., Akyol M. Ö., Öztürk Ü. H., Güneş E., EVALUATION OF COLORED RESIN COMPOSITE VIDEOS ON THE YOUTUBE™ PLATFORM ACCORDING TO ENGAGEMENT METRICS, In: *INTERNATIONAL SCIENTIFIC RESEARCH AND INNOVATION CONGRESS-III*, Azerbaijan, 2025.

B5. Ünsal T., Gencer G., Sapmaz Ş. S., Arat H., Bacak D., Adıyaman F., Babamgül Z., Baygül E., Şahin S., Özyıldırım N. N., INTERACTION METRICS IN ONLINE RESTORATIVE DENTISTRY VIDEOS: A COMPARATIVE STATISTICAL STUDY ‘, In: *ANADOLU 17th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES*, Mardin, Türkiye, 2025.

B6. Güngör İ. H., Gencer G., Karakuş Y. B., Bulut A. S., Olguner Ö., STATISTICAL ANALYSIS OF ENGAGEMENT METRICS IN VIDEO CONTENT RELATED TO PEDIATRIC DENTISTRY BASED ON CONTENT SOURCE, In: *12TH INTERNATIONAL "ARTEMIS" SCIENTIFIC RESEARCH CONGRESS*, Romania, 2025.

B7. Dağ E. İ., Gencer G., Özkan Ö. A., Dönmez Ş., Haki Z., STATISTICAL EVALUATION OF VIEWER ENGAGEMENT IN ENDODONTIC VIDEOS BASED ON DIFFERENT CONTENT SOURCES, In: *12TH INTERNATIONAL "ARTEMIS" SCIENTIFIC RESEARCH CONGRESS*, Romania, 2025.

B8. Koçtürk A. E., Gencer G., Adalı A., Ünlen R., Polat H. N., Kutlu S. E., Elreşefi A. E., STATISTICAL ANALYSIS OF ENGAGEMENT METRICS IN ONLINE VIDEOS ON PROSTHETIC DENTAL TREATMENT BASED ON CONTENT SOURCE, In: *5TH INTERNATIONAL ASKLEPIOS CONGRESS ON MEDICINE, NURSING, MIDWIFERY, AND HEALTH SCIENCES*, Kosovo, 2025.

B9. Gencer K., Gencer G., COMPARATIVE ANALYSIS OF TRANSFER LEARNING MODELS FOR DIABETIC RETINOPATHY DETECTION IN FUNDUS IMAGES, In: *IX. Uluslararası Sağlık, Mühendislik ve Fen Bilimleri Kongresi*, Türkiye, 2024.

B10. Özer G., Gencer G., Karayaz S., Ateş E. İ., Güney B., Çelik D., SOCIAL PROTECTION STATISTICS IN THE WORLD 2010-2021: A SHIELD AGAINST POVERTY AND INSECURITY, In: *EGE 11TH INTERNATIONAL CONFERENCE ON APPLIED*

SCIENCES, Türkiye, 2024.

B11. Yücel H., Gencer G., Yurdakul D., Yıldırım E., İndere G., Budak Z., Balıkçı R., Demir S., HEALTH RESOURCE MANAGEMENT AND CROSS-COUNTRY COMPARISON (2010-2021), In: *EGE 11TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES*, Türkiye, 2024.

B12. Gencer K., Gencer G., ENHANCING SKIN LESION CLASSIFICATION ACCURACY THROUGH ADVANCED PREPROCESSING AND ENSEMBLE DEEP LEARNING METHODS, In: *13. ULUSLARARASI MÜHENDİSLİK, MİMARLIK VE TASARIM KONGRESİ*, Türkiye, 2024.

B13. Çeçen E., Gencer G., Kısa İ., Güçlü S., Gültekin B., Karakaya K., Alıç E., Kılıç R., Çiçek B., Altıntaş Ö. N. A. vd., HEALTH EXPENDITURES AND FINANCING: AN OVERVIEW, In: *12. ULUSLARARASI GAP ZİRVESİ BİLİMSEL ARAŞTIRMALAR KONGRESİ*, Gaziantep, Türkiye, 2024.

B14. Gencer K., Gencer G., TRANSFER LEARNING APPROACH FOR BINARY CLASSIFICATION OF MUSCULOSKELETAL SYSTEM RADIOGRAPHIES, In: *7th INTERNATIONAL CONGRESS ON ENGINEERING SCIENCES AND MULTIDISCIPLINARY APPROACHES*, Türkiye, 2024.

B15. Aktaş E. G., Gencer G., Soyuak Z., Küdür N., Mutlubaş N., Ormantepe Ü., Bal B., Çay Z., Koçak E. N., Aldbes Z., ANALYSIS OF PUBLIC AND PRIVATE SECTOR HEALTH EXPENDITURES IN TURKEY, In: *International Asklepios Congress on Medicine, Nursing, Midwifery, and Health Sciences*, Türkiye, 2024.

B16. Mert A., Dur G., Tuncer Ö., Gencer G., Şenol Y., Birinci Basamak Sağlık Çalışanlarının İş Güvenliği Kültürünün Değerlendirilmesi, In: *23. Doğu Akdeniz Aile Hekimliği Kongresi*, Adana, Türkiye, 2024.

B17. Gencer G., Doğan İ., TÜRKİYE VE OECD ÜLKELERİNDE SAĞLIK SEKTÖRÜ DURUMU VE MODELLENEBİLİR ÖNGÖRÜLER, In: *24. ULUSAL VE 7. ULUSLARARASI BİYOİSTATİSTİK KONGRESİ*, Afyonkarahisar, Türkiye, 2023.

B18. Gencer K., Gencer G., MACHINE LEARNING ASSISTED DECISION MAKING IN PATIENTS WITH POLYCYSTIC OVARY SYNDROME, In: *9 th INTERNATIONAL CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES IN A CHANGING WORLD*, İzmir, Türkiye, 2023, pp. 83-89.

B19. Gencer G., Gencer K., Evaluation of Glaucoma with factor analysis, In: *II. Uluslararası Uygulamalı İstatistik Kongresi*, Türkiye, 2021.

B20. Gencer G., Kınacı İ., Goodness Of Fit Tests Based On Kullback-Leibler Divergence Under Censoring for Weibull Distribution, In: *II. Uluslararası Uygulamalı İstatistik Kongresi*, Türkiye, 2021.

B21. Gencer K., Gencer G., Birge Ö., Serin A. N., Classifying Anemia using Bagging MARS with Machine Learning Methods in Syrian Immigrant Pregnant Women, In: *II. International Conference on Innovative Engineering Applications*, Türkiye, 2021.

B22. Kınacı İ., Gencer G., Goodness of Fit Test For Weibull Distribution Based on Kullback Leibler Divergence under Progressive Hybrid Censoring, In: *8th INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS*, Azerbaijan, 2019.

C. National/international books written or chapters in books:

C2. Chapters in national/international books written:

C2.1. Gencer K., Özer Gökaslan Ç., Gencer G., "Tıp Eğitimi İntörnlük Döneminde Seçmeli Mesleki Eğitim Belirleme Sistemi ve Örnek Bir Uygulama", *Temel Tıp Bilimlerinde Güncel Çalışmalar*, Livre de Lyon, Lyon, 2023.

C2.2. Gencer G., "STATISTICAL ANALYSIS AND MODELING OF THE COVID-19 PANDEMIC ON WEEKLY DEATH COUNTRIES IN OECD COUNTRIES IN 2021 AND 2022", *MODERN MEDICAL AND HEALTH SCIENCES*, Livre de Lyon, Lyon, 2023.

C2.3. Gencer G., Saraçoğlu B., "PARAMETER ESTIMATIONS FOR EXPONENTIAL POWER DISTRIBUTION UNDER LOSS FUNCTIONS: MAXIMUM LIKELIHOOD VS. BAYES", *International Research in Math Sciences V*, Eğitim Yayınevi, 2023.

C2.4. Gencer G., "Model Yeterliliği", *DOĞRUSAL REGRESYON ANALİZİ VE UYGULAMALARI*, NEÜ YAYINLARI, Konya, 2022.

D. Articles published in national peer-reviewed journals:

D1. Gencer G., "KLİNİK ALZHEİMER GÖSTERGELERİ ARASINDAKİ BAĞIMLILIK YAPISININ COPULA FONKSİYONLARI İLE MODELLENMESİ: ANALİTİK ÇALIŞMA", *Türkiye Klinikleri Tıp Bilimleri Dergisi*, 2026.

D2. Özer Gökaslan Ç., Korucu C., Aksu U., Gencer G., "RELATIONSHIP BETWEEN CORONARY ATHEROSCLEROSIS LEVEL DETECTED IN CORONARY CT ANGIOGRAPHY AND PROGNOSTIC NUTRITION INDEX", *Kocatepe Tıp Dergisi*, vol. 27, 2026.

D3. Ünlü S., Gürbüz M., Gencer G., Çetinkol Y., "Cytomegalovırus (CMV) Enfeksiyonu Tanısı İçin Gönderilen ELISA ve Real Time PCR Sonuçlarının Değerlendirilmesi", *Journal of Biotechnology and Strategic Health Research*, vol. 9, no. 1, pp. 11-18, 2025.

D4. Aytuğ Kanber N., Gencer G., "İLK VE ACİL YARDIM PROGRAMI ÖĞRENCİLERİNİN ÇOCUK İHMAL VE İSTİSMARINA YÖNELİK FARKINDALIK DÜZEYLERİNİN BELİRLENMESİ", *Hastane Öncesi Dergisi*, vol. 10, 2025.

D5. Gencer G., "KLİNİK TANI MODELLERİNDE ELASTİK NET LOJİSTİK REGRESYONUN PERFORMANSININ DELONG TESTİ VE KARAR EĞRİSİ ANALİZİ İLE DEĞERLENDİRİLMESİ: METODOLOJİK ÇALIŞMA", *Türkiye Klinikleri Biyoistatistik Dergisi*, 2025.

D6. Gencer G., "Lung Cancer Survival Analysis: A Comparative Evaluation of Cox Proportional Hazards and Accelerated Failure Time Models: An Analytical Study Akciğer Kanseri Sağkalım Analizi: Cox Orantılı Tehlikeler ve Hızlandırılmış Başarısızlık Süresi Modellerinin Karşılaştırmalı Değerlendirmesi: Analitik Çalışma", *Türkiye Klinikleri Tıp Bilimleri Dergisi*, vol. 45, no. 1, pp. 8-16, 2025.

D7. Özer Gökaslan Ç., Gencer G., Korucu C., "RELATIONSHIP BETWEEN CORONARY ATHEROSCLEROSIS LEVEL DETECTED IN CORONARY CT ANGIOGRAPHY AND PROGNOSTIC NUTRITION INDEX", *Kocatepe Tıp Dergisi*, 2025.

D8. Mert A., Dur G., Gencer G., Şensoy N., "ÜNİVERSİTE HASTANESİ SAĞLIK ÇALIŞANLARININ İŞ SAĞLIĞI VE GÜVENLİĞİ KANUNU HAKKINDAKİ BİLGİ DÜZEYLERİ VE UYGULAMA HAKKINDAKİ MEMNUNİYET DURUMLARI", *Kocatepe Tıp Dergisi*, 2025.

D9. Gencer K., Gencer G., "Türkiye'de Tıp Eğitimi Müfredatlarında Yapay Zeka Derslerinin Durumunun Araştırılması", *Bilgisayar Bilimleri ve Teknolojileri Dergisi*, vol. 5, no. 2, pp. 66-76, 2024.

D10. Gencer G., "Çarpık Verilerin Dönüşüm Teknikleri ile İyileştirilmesi ve AUC Değerleri Üzerindeki Etkiler: Bir Simülasyon Çalışması", *Türkiye Klinikleri Biyoistatistik Dergisi*, vol. 16, no. 3, pp. 157-167, 2024.

D11. Mert A., Dur G., Tuncer Ö., Gencer G., Şenol Y., "Birinci Basamak Sağlık Çalışanlarının İş güvenliği Kültürünün Değerlendirilmesi", *İzmir Eğitim ve Araştırma Hastanesi Tıp Dergisi*, vol. 28, no. 4, pp. 319-327, 2024.

D12. Gencer K., Gencer G., Çizmeci İ. H., "Deep Learning Approaches for Retinal Image Classification: A Comparative Study of GoogLeNet and ResNet Architectures", *International Scientific and Vocational Studies Journal*, vol. 8, no. 2, pp. 123-128, 2024.

D13. Gencer G., "Goodness-of-fit tests based on Kullback-Leibler divergence for bladder cancer survival analysis: Applications to exponentiated exponential distribution", *Journal of New Results in Science*, vol. 13, no. 2, pp. 84-100, 2024.

D14. Gencer G., Erol M., Çelik Y., Özdinç İ. H., Karaaslan D., Karagöz E., Karaca N., "An Examination of the Attitudes and Behaviors of Turkish Doctors and Medical Students towards Emigration", *Black Sea Journal of Health Science*, vol. 7, no. 4, pp. 160-168, 2024.

D15. Gencer K., Gencer G., "TIP FAKÜLTESİ ÖĞRENCİLERİNİN TIBBİ YAPAY ZEKA HAZIR BULUNUŞLULUĞUNUN İNCELENMESİ", *Kocatepe Tıp Dergisi*, vol. 25, no. 2, pp. 143-149, 2024.

D16. Gencer G., Gencer K., Dumanlı A., "Variable selection in gender and age decision-making for traumatic spine and thoracic pathologies after various accidents with Multivariate Adaptive Regression Spline (MARS)", *HEALTH SCIENCES QUARTERLY*, vol. 3, no. 3, pp. 187-193, 2023.

D17. Dumanlı A., Aydın S., Gencer G., "Evaluation of Traumatic Vertebra and Rib Fractures", *Journal of Medical Research and Surgery*, vol. 3, no. 5, pp. 86-95, 2022.

D18. Gencer G., Gencer K., "A comparative study Analysis of factors affecting happiness after the Covid-19 pandemic", *Dicle University Journal of the Institute of Natural and Applied Science*, vol. 10, no. 2, pp. 185-196, 2021.

D19. Gencer G., Gencer K., "Work Accidents and Occupational Diseases Cluster Analysis with respect to the classification of the provinces in Turkey", *Paramedik ve Acil Sağlık Hizmetleri Dergisi*, vol. 2, no. 2, pp. 103-113, 2021.

D20. Gencer G., "Performances of Variable Selection Methods in Surgical Success: MARS vs Random Forest", *International Journal of Research in Engineering, IT and Social Sciences*, vol. 11, no. 10, pp. 33-35, 2021.

D21. Gencer G., Gencer K., "ANALYSIS OF ANEMIA IN SYRIAN IMMIGRANT PREGNANT WOMEN", *International Journal of Natural and Engineering Sciences*, vol. 15, no. 1, pp. 12-16, 2021.

D22. Gencer G., Gencer K., "EVALUATION OF FACTORS AFFECTING BABY BIRTH WEIGHT BY REGRESSION ANALYSIS", *International Journal of Naturaland EngineeringSciences*, vol. 15, no. 1, pp. 43-47, 2021.

D23. Gencer G., Serin A. N., Gencer K., "Socio-Demographic Analysis of Female Circumcision (F-G-M) in Sudan", *International Journal of Research in Engineering, IT and Social Sciences*, vol. 11, no. 3, pp. 21-23, 2021.

D24. Gencer G., Gencer K., "Estimations For The Odd Weibull Distribution under Progressive Type-II Right Censored Samples", *Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi*, vol. 24, no. 1, pp. 29-36, 2020.

D25. Gencer G., Gencer K., "Comparison of estimators under different loss functions for two-parameter bathtub - shaped lifetime distribution", *Cumhuriyet Science Journal*, vol. 41, no. 3, pp. 602-611, 2020.

D26. Gencer G., Gencer K., "Comparison Of Maximum Likelihood And Bayes Estimators Under Symmetric And Asymmetric Loss Functions By Means Of Tierney Kadane's Approximation For Weibull Distribution", *Turkish Journal of Science and Technology*, vol. 14, no. 2, pp. 69-78, 2019.

D27. Gencer G., Saraçoğlu B., "Comparison of Maximum Likelihood and Approximate Bayes Estimators under different loss functions for Parameters of Odd Weibull Distribution", *Journal of Selçuk University Natural and Applied Science*, vol. 5, no. 1, pp. 18-32, 2016.