CITES:

Apparel sizing using trimmed PAM and OWA operators (22):

1. Looking for representative fit models for apparel sizing

2. Modeling of female human body shapes for apparel design based on cross mean sets.

3. A review of research and innovation in garment sizing, prototyping and fitting.

4. Archetypoids: A new approach to define representative archetypal data.

5. The k-means algorithm for 3D shapes with an application to apparel design.

6. An ensemble of ordered logistic regression and random forest for child garment size matching.

7. Unsupervised classification of children's bodies using currents.

8. Anthropometry: An R Package for Analysis of Anthropometric Data.

9. Analysis of user satisfaction for unisex medical uniform.

10. Archetypal shapes based on landmarks and extension to handle missing data.

11. Unsupervised classification of children's bodies using currents

12. Archetypal analysis: An alternative to clustering for unsupervised texture segmentation

13. OWA aggregation of multi-criteria with mixed uncertain fuzzy satisfactionsmex

14. Optimization of garment sizing and cutting order planning in the context of mass customization

15. Exploring the Use of 3D Apparel Visualization Software for Fitting Garments for People With Disabilities **(PhD thesis)**.

16. Archetype Analysis: A new subspace outlier detection approach.

17. The Semisupervised Approach for Data Driven and Consumer Oriented Sizing Systems in the Clothing Industry.

18. Machine Learning and Probabilistic Graphical Models for Decision Support Systems.

19. Predict 3D Body Measurements with 2D Images (PhD thesis).

20. Intellectual Support with Machine Learning for Decision-making in Garment Manufacturing Industry: A Review **(In book Machine Learning and Probabilistic Graphical Models for Decision Support Systems)**.

21. The impact of true fit® technology on millennial consumer confidence and satisfaction in their online clothing purchase (master's thesis).

22. Cyclic inclusive fashion design process based on an FEA model for inclusive fashion education.

Archetypal analysis: Contributions for estimating boundary cases in multivariate accommodation problem (31):

- 1. Looking for representative fit models for apparel sizing.
- 2. Modeling of female human body shapes for apparel design based on cross mean sets.
- 3. Archetypoids: A new approach to define representative archetypal data.
- 4. Evaluating the utility of mid-infrared spectral subspaces for predicting soil properties.
- 5. Functional archetype and archetypoid analysis.
- 6. Archetypal analysis for data-driven prototype identification.
- 7. Anthropometry: An R Package for Analysis of Anthropometric Data.
- 8. Archetypoid Analysis for Sports Analytics.
- 9. Archetypal shapes based on landmarks and extension to handle missing data.

10. Cargas de trabajo no presencial ECTS arquetípicas del estudiantado: ¿cómo se reparten el trabajo semanalmente? **(conference paper)**.

- 11. Crane cabins' interior space multivariate anthropometric modeling.
- 12. Detection of anomalies in water networks by functional data analysis.

13. Frame-based Data Factorizations (conference paper).

14. A Study of Fuzzy Clustering to Archetypal Analysis (In book Yin H., Camacho D., Novais P.,

Tallón-Ballesteros A. (eds), Intelligent Data Engineering and Automated Learning – IDEAL 2018. IDEAL 2018. Lecture Notes in Computer Science).

15. Robust multivariate and functional archetypal analysis with application to financial time series analysis.

16. Archetypal analysis: An alternative to clustering for unsupervised texture segmentation.

17. A data-driven classification of 3D foot types by archetypal shapes based on landmarks.

- 18. Finding archetypal patterns for binary questionnaires.
- 19. Improving Inferences about Preferences in Choice Modeling (**PhD thesis**).

20. Archetype Analysis: A new subspace outlier detection approach.

21. Comparison of Univariate and Multivariate Anthropometric Accommodation of the Northwest Mexico Population.

22. Hand Shape Modeling for the Mexican Population (conference chapter).

23. Decoding Influenza Outbreaks in a Rural Region of the USA with Archetypal Analysis.

24. Archetypal Analysis for Ordinal Data.

25. Study on multivariate analysis of anthropometric measures for upper body exoskeletons using archetypal analysis.

26. Archetypal analysis with missing data: see all samples by looking at a few based on extreme profiles.

27. Archetypal analysis for histogram-valued data (**PhD thesis**).

28. Anthropometric accommodation percentage comparison for univariate and multivariate representative Mexican hand models.

29. Computing efficient data summaries (PhD thesis).

30. Prediction of Anthropometric Dimensions Using Multiple Linear Regression and Artificial Neural Network Models.

31. Archetypal analysis of COVID-19 in Montana, USA, March 13, 2020 to April 26, 2022.

Looking for representative fit models for apparel sizing (30):

1. Modeling of female human body shapes for apparel design based on cross mean sets.

2. Archetypoids: A new approach to define representative archetypal data.

3. An ensemble of ordered logistic regression and random forest for child garment size matching.

4. New technologies for customizing products for people with special necessities: project FASHION-ABLE.

5. A PCA-based bio-motion generator to synthesize new patterns of human running.

- 6. Anthropometry: An R Package for Analysis of Anthropometric Data.
- 7. Panties Usage: Feel Comfortable or Sexy?
- 8. Modeling of half-scale human bodies in active body positions for apparel design and testing.

9. Design for Inclusivity: Identifying and Overcoming the Design and Social Barriers to Adaptive Clothing **(PhD thesis)**

10. Resultados preliminares del proyecto InKreate

11. Development of a Military Uniform Size System Using Hybrid Support Vector Clustering with a Genetic Algorithm

12. Clothing measurement prediction system and method (Patent application).

13. Sizing system rompi anti-peluru untuk personel tentara nasional indonesia (**PhD thesis**).

14. A novel optimization approach to minimize aggregate-fit-loss for improved breast sizing.

15. The impact of age and body mass index on a bra sizing system formed by anthropometric measurements of Sichuan Chinese females.

16. Data mining-based optimal assignment of apparel size for mass customization.

17. Knowledge Discovery and Data Mining-based Garment Size Selection for Mass Customization.

18. Understanding Female Breast Shape to Improve Bra Sizing Via 3D and 4D Body Scanning Technology **(PhD thesis)**.

19. Plus-size men: Perceptions of available clothing and models used to market the clothing to market the clothing **(PhD thesis)**.

20. Comparison of Univariate and Multivariate Anthropometric Accommodation of the Northwest Mexico Population.

21. The Semisupervised Approach for Data Driven and Consumer Oriented Sizing Systems in the Clothing Industry.

22. Requisitos para medição do corpo humano em sistema de ambiente virtual de prova no e-commerce de moda **(PhD thesis)**.

23. Image analysis as a basis to the design of wheelchair rugby sportswear (conference paper).

24. Captura de movimentos e design do vestuário: análise da cintura-escapular para a ergonomia da cava.

25. Impact of Bi-axial Stretching of Rib Knitted Fabric on its EMI Shielding (conference paper).

26. The Bridal Industry: Body Image and Sizing Charts (University report).

27. Garment sizing system development for Amhara policemen uniforms using data mining techniques.

28. Establishment of Standard Size Measurement for Secondary School in Sudan using Data Mining Techniques.

29. Development of standardised sizing system and size charts for the production of ready-to-wear clothing for Ghanaian children aged 6-11 (**PhD thesis**).

30. A Conceptual Review of Uniform Wear Attributes Identification for Size Fit.

Archetypoids: A new approach to define representative archetypal data (37):

1. An ensemble of ordered logistic regression and random forest for child garment size matching.

- 2. Functional archetype and archetypoid analysis.
- 3. Archetypal analysis for data-driven prototype identification.
- 4. Anthropometry: An R Package for Analysis of Anthropometric Data.
- 5. Archetypoid Analysis for Sports Analytics.
- 6. A Analise of arquetipos: Una revisao bibliografica.

7. Pure endmember extraction using robust kernel archetypoid analysis for hyperspectral analysis.

8. Archetypal shapes based on landmarks and extension to handle missing data.

9. Cargas de trabajo no presencial ECTS arquetípicas del estudiantado: ¿cómo se reparten el trabajo semanalmente? **(conference paper)**.

10. Bivariate Functional Archetypoid Analysis: An Application to Financial Time Series (In book M. Corazza et al. (eds.), Mathematical and Statistical Methods for Actuarial Sciences and Finance)

11. Detection of anomalies in water networks by functional data analysis.

12. Functional principal component analysis for identifying multivariate patterns and archetypes of growth, and their association with long-term cognitive development.

13. Robust multivariate and functional archetypal analysis with application to financial time series analysis.

14. Automatic classification of human facial features based on their appearance.

15. Finding outstanding performance in handball players based on statistical analysis **(conference paper)**.

- 16. Archetypal analysis: An alternative to clustering for unsupervised texture segmentation.
- 17. Analysis of 2D Foot morphology by functional archetypal analysis (conference paper)
- 18. Automatic classification of human facial features based on their appearance.
- 19. Using Archetypoid Analysis to Classify Institutions and Faculties of Economics.
- 20. A data-driven classification of 3D foot types by archetypal shapes based on landmarks.
- 21. A Web Application for Interactive Visualization of European Basketball Data.
- 22. Finding archetypal patterns for binary questionnaires.
- 23. Modeling Player and Team Performance in Basketball (working paper).
- 24. Robust archetypoids for anomaly detection in big functional data.
- 25. A New Geometric Metric in the Shape and Size Space of Curves in Rn.
- 26. Archetypal temporal dynamics of arid and semi-arid rangelands.
- 27. Archetype Analysis: A new subspace outlier detection approach.
- 28. Visualizing Profiles of Large Datasets of Weighted and Mixed Data.
- 29. Comparing Different Approaches to Archetypal Analysis as a Fuzzy Clustering Tool.
- 30. Decoding Influenza Outbreaks in a Rural Region of the USA with Archetypal Analysis.
- 31. Classifying Top Economists Using Archetypoid Analysis.
- 32. Archetypal Analysis for Ordinal Data.
- 33. Archetypal analysis for histogram-valued data (PhD thesis).
- 34. Looking for COVID side effects in the EU through the analysis of health and behavioural profiles.
- 35. Archetypal Analysis++: Rethinking the Initialization Strategy (working paper).
- 36. Weighted least squares for archetypal analysis with missing data.
- 37. Clustering based on the archetypal analysis.

The k-means algorithm for 3D shapes with an application to apparel design (24):

1. A new extrinsic sample mean in the shape space with applications to the boundaries of anatomical structures.

- 2. 3D Body shape clustering based on PSO by volumetric overlap (conference paper).
- 3. 3D body shape clustering based on PSO by multi-fitness function (conference paper).
- 4. Unsupervised classification of children's bodies using currents.
- 5. Anthropometry: An R Package for Analysis of Anthropometric Data.
- 6. Gaussian Bayes Classifier for 2D Shapes in Kendall Space (conference chapter).
- 7. Bayesian Approach in Kendall Shape Space for Plant Species Classification (conference chapter).
- 8. Archetypal shapes based on landmarks and extension to handle missing data.
- 9. Using 3D Statistical Shape Models for Designing Smart Clothing: Volume V: Human Simulation and Virtual Environments, Work With Computing Systems (WWCS), Process Control (**book chapter**)

10. A New Method of Selecting K-means Initial Cluster Centers Based on Hotspot Analysis (conference paper).

11. A Kernel Regression Procedure in the 3D Shape Space with an Application to Online Sales of Children's Wear.

- 12. Supervised classification of geometrical objects by integrating currents and functional data analysis.
- 13. Generalized partially linear models on Riemannian manifolds.
- 14. Avaliação da performance de índices de similaridade aplicados ao agrupamento de objetos textuais.

15. Use of text mining techniques for unsupervised organization of digital procedural acts.

16. Sets that maximize probability and a related variational problem.

17. A Riemannian geometric framework for manifold learning of non-Euclidean data.

18. Pattern analysis of Australia soil profiles for plant available water capacity.

19. Studying Three Abstract Artists Based on a Multiplex Network Knowledge Representation.

20. Sets that maximize probability and a related variational problem.

21. Machine Learning and Soft Computing Applications in Textile and Clothing Supply Chain:

Bibliometric and Network Analyses to Delineate Future Research Agenda.

22. Using bagging to enhance clustering procedures for planar shapes.

23. Agrupamento de formas planas utilizando distâncias baseadas na distribuição Bingham complexa **(proceedings paper)**.

24. Heterarchy or Hierarchy: Modeling and Simulation Applied to Social Organization at the Late Iron Age Site of Kerkenes, Central Anatolia.

Anthropometry: An R Package for Analysis of Anthropometric Data (31):

1. Archetypoid Analysis for Sports Analytics.

2. Archetypal shapes based on landmarks and extension to handle missing data.

3. Detection of anomalies in water networks by functional data analysis.

4. Frame-based Data Factorizations (conference paper).

5. National Innovation Systems Archetypal Analysis.

6. Computational Tools in Forensic Anthropology: The Value of Open-Source Licensing as a Standard.

7. Robust multivariate and functional archetypal analysis with application to financial time series analysis.

8. Archetypal analysis: An alternative to clustering for unsupervised texture segmentation.

9. Using Archetypoid Analysis to Classify Institutions and Faculties of Economics.

10. A data-driven classification of 3D foot types by archetypal shapes based on landmarks.

11. Comparative characteristics of year transversal parameter changes of young people during the first year of studying at the university.

12. Finding archetypal patterns for binary questionnaires.

13. Robust archetypoids for anomaly detection in big functional data.

14. Modeling Dependence Relationships of Anthropometric Variables Using Copula Approach.

15. Archetype Analysis: A new subspace outlier detection approach.

16. Comparison of Univariate and Multivariate Anthropometric Accommodation of the Northwest Mexico Population.

17. Designing for the plus-size men: towards a better fitting: a case of Harare, Zimbabwe.

18. Comparative characteristics of the parameters' changes of skin and fat flexures thickness of extremeties at youth under the condition of higher education.

19. Prediction of military combat clothing size using decision trees and 3D body scan data.

20. Hand Shape Modeling for the Mexican Population (conference chapter).

21. Classifying Top Economists Using Archetypoid Analysis.

22. Comparative characteristics of the parameters' changes of skin and fat flexures thickness of extremeties at youth under the condition of higher education.

23. Respirators, Face Masks, and Diverse Populations: An Analysis of 3D Facial Anthropometrics.

24. The Portuguese anthropometric database comparison **(In book Occupational Safety and Hygiene IV)**.

25. Archetypal Analysis of Geophysical Data Illustrated by Sea Surface Temperature.

26. Anthropometric accommodation percentage comparison for univariate and multivariate representative Mexican hand models.

27. Computing efficient data summaries (PhD thesis).

28. Testing heterochrony: Connecting skull shape ontogeny and evolution of feeding adaptations in baleen whales.

29. Looking for COVID side effects in the EU through the analysis of health and behavioural profiles.

30. Método estadístico de clasificación de formas de cuerpos, aplicable en el desarrollo técnico de vestuario.

31. Automatic Anthropometric Measurement Systems from 3D Hand Scans: Accuracy of a Developed Algorithm for Large Number and Various Types of Dimensions **(PhD thesis)**.

Archetypoid Analysis for Sports Analytics (32)

1. Archetypal shapes based on landmarks and extension to handle missing data.

2. Bivariate Functional Archetypoid Analysis: An Application to Financial Time Series (In book M.

Corazza et al. (eds.), Mathematical and Statistical Methods for Actuarial Sciences and Finance)

3. Detection of anomalies in water networks by functional data analysis.

4. Rank Dynamics for Functional Data.

5. Robust multivariate and functional archetypal analysis with application to financial time series analysis.

6. Model Trees for Identifying Exceptional Players in the NHL and NBA Drafts (**In book: Machine Learning and Data Mining for Sports Analytics**)

- 7. Finding outstanding performance in handball players based on statistical analysis
- 8. Basketball players' versatility: Assessing the diversity of tactical roles (conference paper).
- 9. Archetypal analysis: An alternative to clustering for unsupervised texture segmentation.
- 10. Analysis of 2D Foot morphology by functional archetypal analysis (conference paper).
- 11. Using Archetypoid Analysis to Classify Institutions and Faculties of Economics.
- 12. A data-driven classification of 3D foot types by archetypal shapes based on landmarks.
- 13. Sports analytics Evaluation of basketball players and team performance.
- 14. Finding archetypal patterns for binary questionnaires.
- 15. Seated Volleyball: The Influence of Motor Deficiency Type on Players' Tactical Roles.
- 16. Robust archetypoids for anomaly detection in big functional data.
- 17. Archetypal contour shapes (conference paper).
- 18. Quantifying the value of sprints in elite football using spatial cohesive networks.
- 19. Fundamentación del perfil del Analista Técnico Deportivo que sustituye al Metodólogo. Reflexión en el Sistema Deportivo Mexicano (**report**).
- 20. Archetype Analysis: A new subspace outlier detection approach.
- 21. A Dockerized Big Data Architecture for Sports Analytics.
- 22. Classifying Top Economists Using Archetypoid Analysis.
- 23. Archetypal Analysis for Ordinal Data.
- 24. A Comparative Study of the Different Classification Algorithms on Football Analytics.
- 25. Spor Analitiği **(In book: Spor Bilimleri Araştırmaları)**.
- 26. Archetypal analysis for histogram-valued data (**PhD thesis**).
- 27. Efficiency and productivity evaluation of basketball players' performance.
- 28. Wage dispersion and sports performance: does gender matter?

29. Archetypal Curves in the Shape and Size Space: Discovering the Salient Features of Curved Big Data by Representative Extremes.

30. An innovative method for accurate NBA player performance forecasting and line-up optimization in daily fantasy sports.

31. Clustering based on the archetypal analysis.

32. Sports Analytics: Data Mining to Uncover NBA Player Position, Age, and Injury Impact on Performance and Economics.

Forecasting basketball players' performance using sparse functional data (20)

1. A data-driven classification of 3D foot types by archetypal shapes based on landmarks.

2. Finding archetypal patterns for binary questionnaires.

3. Modeling Player and Team Performance in Basketball (working paper).

4. Robust archetypoids for anomaly detection in big functional data.

5. Sports analytics – Evaluation of basketball players and team performance.

6. Archetype Analysis: A new subspace outlier detection approach.

7. A data science approach analysing the impact of injuries on basketball player and team performance.

8. Exploratory Factor Analysis of Match Period and Sex-Related Differences of External and Internal Workload Demands in Youth Basketball Players.

9. Forecasting Most Valuable Players of the National Basketball Association (master thesis).

10. Archetypal Analysis for Ordinal Data.

11. Substantiation of Methods for Predicting Success in Artistic Swimming.

12. Training Methods to Improve Sports Performance and Health (book).

13. A Hybrid Approach for Interpretable Game Performance Prediction in Basketball **(conference paper)**.

14. Nonparametric Functional Data Analysis for Forecasting Container Throughput: The Case of Shanghai Port.

15. Forecasting hourly electricity demand with nonparametric functional data analysis.

16. The jump shot performance in competitions among youth basketball players aged 13 and 14 in Ho Chi Minh City.

17. Shooting for Success: an Analysis of Predictive Basketball Analytics (PhD thesis).

18. Estimating Sparsely and Irregularly Observed Multivariate Functional Data.

19. Evaluating the effectiveness of machine learning models for performance forecasting in basketball: a comparative study.

20. Sports Analytics: Data Mining to Uncover NBA Player Position, Age, and Injury Impact on Performance and Economics.

A web application for interactive visualization of European basketball data (7)

1. Construction and Simulation of a Multiattribute Training Data Mining Model for Basketball Players Based on Big Data.

2. Data Mining No Esporte: Um Exemplo de Aplicação (bachelor thesis).

3. Study and application of computer information big data in basketball vision system using highdefinition camera motion data capture.

4. Developing a Multicriteria Decision-Making Model Based on a Three-Layer Virtual Internet of Things Algorithm Model to Rank Players' Value.

5. A bibliography experiment on research within the scope of industry 4.0 application areas in sports.

6. Technological Breakthroughs in Sport: Current Practice and Future Potential of Artificial Intelligence, Virtual Reality, Augmented Reality, and Modern Data Visualization in Performance Analysis.

7. A Basketball Big Data Platform for Box Score and Play-by-Play Data.

Robust archetypoids for anomaly detection in big functional data (19)

1. Functional Kernel Density Estimation: Point and Fourier Approaches to Time Series Anomaly Detection (**working paper**).

2. Combining Classification and User-Based Collaborative Filtering for Matching Footwear Size.

3. Outlier Detection for Functional Data with R Package fdaoutlier (**preprint**).

4. Learning Novelty Detection Outside a Class of Random Curves with Application to COVID-19 Growth.

5. Alphacore: Data Depth based Core Decomposition (proceedings paper).

6. Archetypal Analysis for Ordinal Data.

7. Detecting and classifying outliers in big functional data.

8. A geometric perspective of functional outlier detection.

9. Depthgram: Visualizing outliers in high-dimensional functional data with application to fMRI data exploration.

10. Data adaptive functional outlier detection: Analysis of the Paris bike sharing system data.

11. Anomaly Detection Based on Convex Analysis: A Survey.

12. FAWPA: A FAW Attack Protection Algorithm Based on the Behavior of Blockchain Miners.

13. Looking for COVID side effects in the EU through the analysis of health and behavioural profiles.

14. Scalable Outlier Detection Methods for Functional Data (PhD thesis).

15. Comparison of Data Depth Calculation Method for Fault Detection in Electric Signal **(book chapter)**.

16. Archetypal Curves in the Shape and Size Space: Discovering the Salient Features of Curved Big Data by Representative Extremes.

17. Domain-knowledge-informed functional outlier detection for line quality control systems.

18. Data depth and core-based trend detection on blockchain transaction networks.

19. Biarchetype analysis: simultaneous learning of observations and features based on extremes (**working paper**).