

Article Title: Exploring the Landscape of Data Analysis: A Review of its Application and Impact in Ecuador

Journal Name: Computers

Author Names: Manuel Ayala-Chauvin, Fátima Avilés-Castillo, Jorge Buele.

Supplement Table A1. Databases and Search Terms Used

N°	MESH/search terms	Total					
		SpringerLink	Scopus	IEEE Xplore	Web of Science	ACM	
1	“Big Data” AND Ecuador	662	32	59	251	26	1030
2	“Big Data” AND Hadoop AND Ecuador	30	2	5	12	11	60
3	“big data” AND ((industry OR manufactur*) OR (education OR student or research) OR (Society or govern*)) AND Ecuador	655	19	14	270	1	962
4	“big data” AND “data mining” AND companies OR e-government	474	1	85	126	2	688
Total		1821	54	163	659	40	2740

Supplement Table A2. Articles used in the review.

Autor	Year	Knowledge Area/Sub-area	Title
Ayala et al.	2023	Social sciences/social and behavioral sciences	Socio-spatial Segregation Using Computational Algorithms: Case Study in Ambato, Ecuador
López-Fierro et al.	2021	Social sciences/social and behavioral sciences	If it looks, retweets and follows like a troll; Is it a troll?: Targeting the 2021 Ecuadorian Presidential Elections Trolls
López-Fierro et al.	2021	Social sciences/social and behavioral sciences	Designing a Sentiments Analysis Alternative for rating tweets regarding the Ecuadorian 2021 Presidential Campaigns

Cruz E. et al.	2019	Social sciences/business education and administration	Mining top-up transactions and online classified ads to predict urban neighborhoods socioeconomic status
Martínez-Mosquera D. et al.	2019	Social sciences/business education and administration	Framework for Big Data integration in e-government
Toapanta Toapanta	2020	Social sciences/business education and administration	Blockchain Analysis Applied to a Process for the National Public Data System for Ecuador
Tenesaca-Luna G. et al.	2019	Social sciences/social and behavioral sciences	Use of Apache Flume in the Big Data Environment for Processing and Evaluation of the Data Quality of the Twitter Social Network
Herrera Herrera N.	2020	Services/transportation services	Big Data Architecture Proposal for Vehicular Traffic Detection
Herrera Herrera et al.	2016	Services/transportation services	Analysis of the Factors Generating Vehicular Traffic in the City of Quito and Its Relation to the Application of Sensorial and Social Data with Big Data as a Basis for Decision Making
Reyes Reyes F. et al.	2022	Health and social services/medicine	Prediction of Diseases in the Elderly in Manabí Through Big Data Technologies
Yacchirema, D. et al.	2018	Health and social services/medicine	A Smart System for Sleep Monitoring by Integrating IoT with Big Data Analytics
Ponce-Guevara et al.	2017	Science/life sciences	GreenFarm-DM: A Tool for Analyzing Vegetable Crops Data from a Greenhouse Using Data Mining Techniques (First Trial)
Estupiñán J. et al.	2021	Science/physical science	Neutrosophic K-Means for the Analysis of Earthquake Data in Ecuador
Andrade X. et al.	2019	Science/physical science	RiSC: Quantifying Change after Natural Disasters to Estimate Infrastructure Damage with Mobile Phone Data

Castro R. et al.	2019	Science/physical science	Assessing the Horizontal Positional Accuracy in Openstreetmap: A Big Data Approach
Guaman A. et al.	2019	Engineering/engineering and related professions	Short-Term Load Forecasting in the Distribution System of the Electric Company of Ambato (EEASA) Based on Big Data Criteria
Villegas-Ch W. et al.	2019	Engineering/architecture and construction	Application of a Smart City Model to a Traditional University Campus with a Big Data Architecture: A Sustainable Smart Campus
Espinosa-Pinos C. et al.	2022	Education/teacher training	Predicting Academic Performance in Mathematics Using Machine Learning Algorithms
Villegas-Ch W. et al.	2020	Education/teacher training	Data Analysis as a Tool for the Application of Adaptive Learning in a University Environment
Tejedor S. et al.	2020	Education/teacher training	Emerging Lines in the Teaching of University Communication the Inclusion of Data Journalism in Universities in Spain, Colombia and Ecuador
Baldeon Egas P. et al.	2020	Education/teacher training	Application of Data Mining and Data Visualization in Strategic Management Data at Israel Technological University of Ecuador
Urena-Torres J. et al.	2017	Education/teacher training	Analysis and Processing of Academic Data from a Higher Institution with Tools for Big Data

The complete information, as *.ris files are in the following link: <https://github.com/faviles7/Trends-Ecuador>

Código de campo cambiado