

PROYECTO SISTEMAS BASADOS EN CONICIMIENTO

Proyecto del segundo bimestre

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Fecha: 07/07/2021

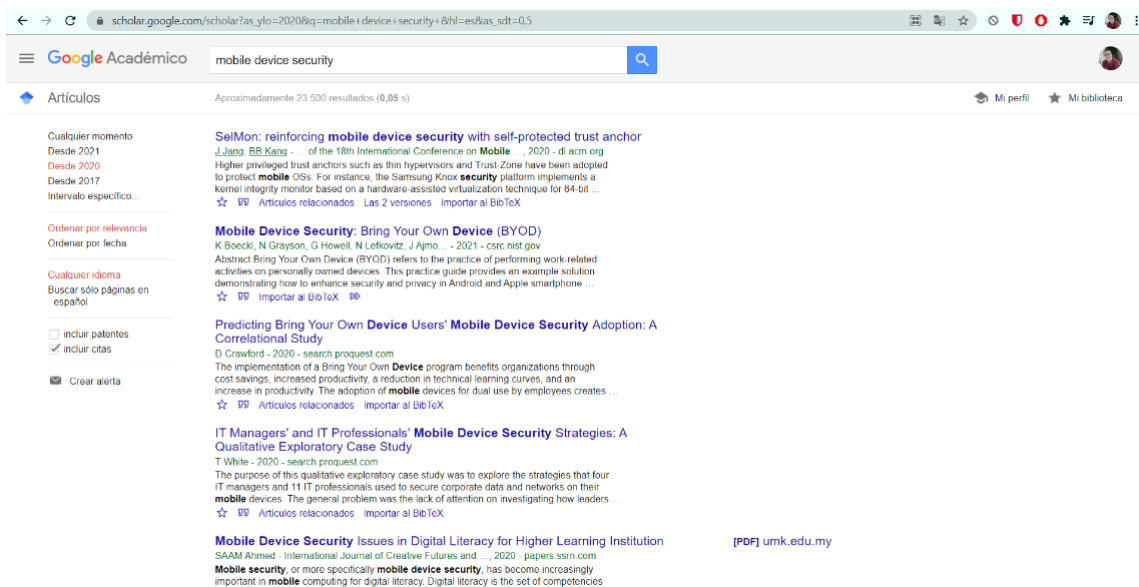
Dominio de trabajo:

Artículos científicos sobre Mobile Device Security

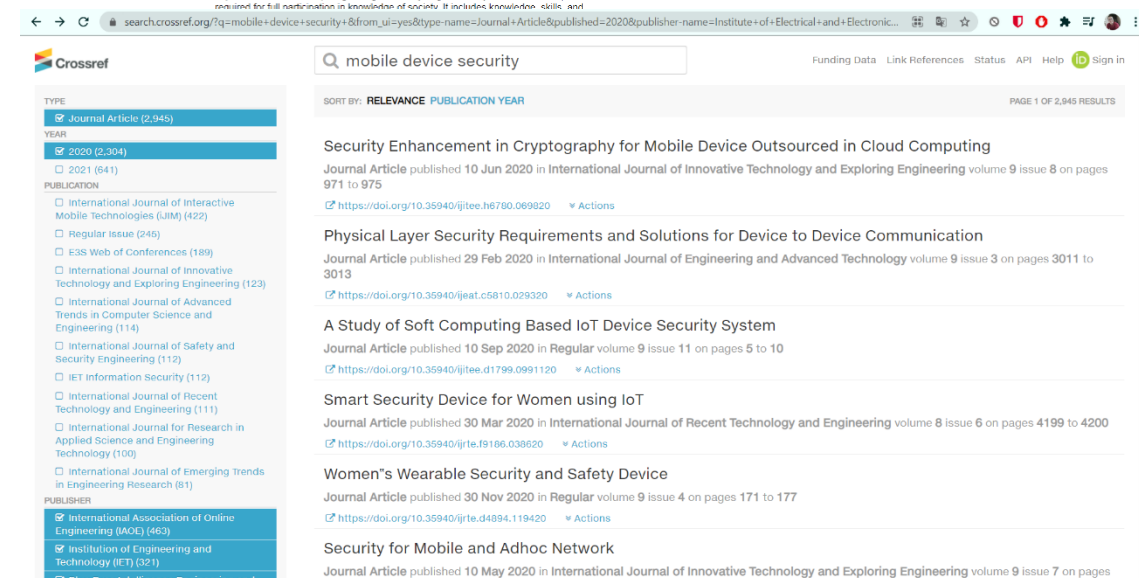
Fuentes de datos de dominio con las que se trabajara

- Artículos científicos sobre Seguridad en los dispositivos móviles

En cuanto a los recursos de donde se va a extraer la data será de la página de **Google Academic, Crosref**, obteniendo datos sobre los artículos científicos en el área de las ciencias de Mobile Device Security, obteniendo título, autores, número de páginas, resumen, autores, fecha de publicación, tipo de documento, entre otros; la búsqueda se hará de todas las regiones y países con respecto al 2020 y 2021.



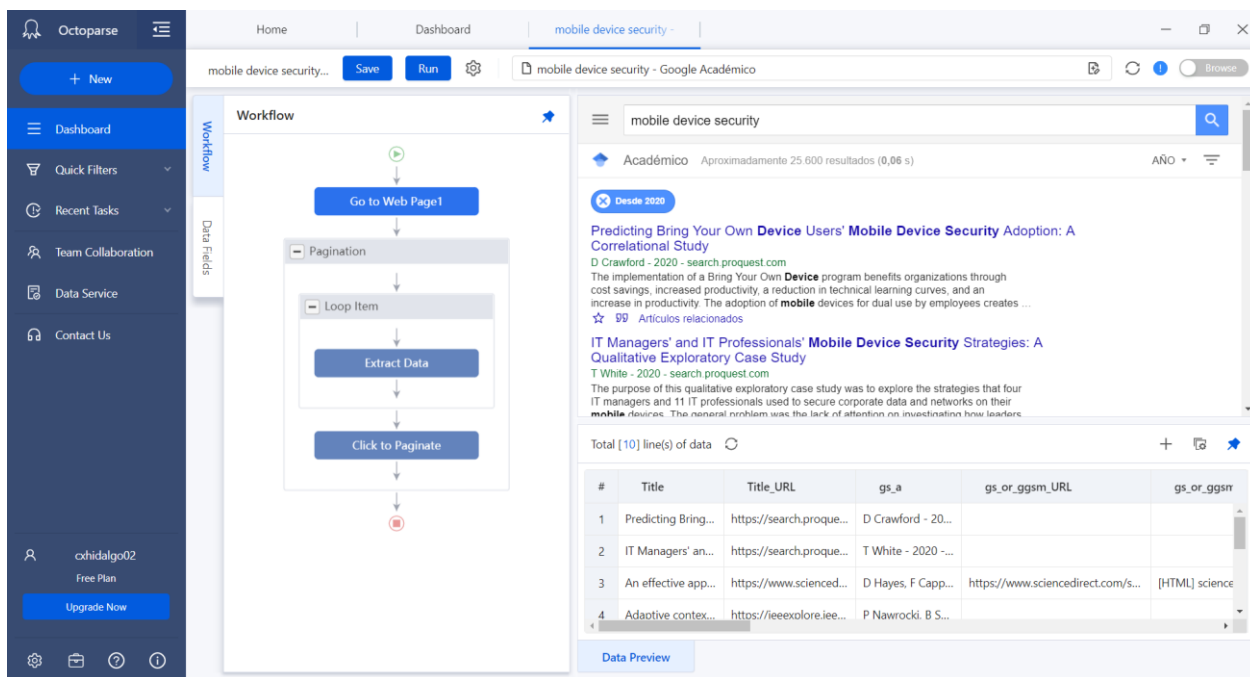
The screenshot shows the Google Scholar search results for 'mobile device security'. The search bar at the top shows the query 'mobile device security' with approximately 23,500 results. The results list several articles, including 'SelfMon: reinforcing mobile device security with self-protected trust anchor' by J. Jang and B. Kang, 'Mobile Device Security: Bring Your Own Device (BYOD)' by K. Boeckl, N. Grayson, G. Howell, N. Lefkowitz, and J. Almo, 'Predicting Bring Your Own Device Users' Mobile Device Security Adoption: A Correlational Study' by D. Crawford, and 'IT Managers' and IT Professionals' Mobile Device Security Strategies: A Qualitative Exploratory Case Study' by T. White. Each entry includes the title, authors, a brief abstract, and links to the full text or related articles.



The screenshot shows the Crossref search results for 'mobile device security'. The search bar at the top shows the query 'mobile device security' with 2,945 results. The results list several articles, including 'Security Enhancement in Cryptography for Mobile Device Outsourced in Cloud Computing' by Journal Article published 10 Jun 2020, 'Physical Layer Security Requirements and Solutions for Device to Device Communication' by Journal Article published 29 Feb 2020, 'A Study of Soft Computing Based IoT Device Security System' by Journal Article published 10 Sep 2020, 'Smart Security Device for Women using IoT' by Journal Article published 30 Mar 2020, 'Women's Wearable Security and Safety Device' by Journal Article published 30 Nov 2020, and 'Security for Mobile and Adhoc Network' by Journal Article published 10 May 2020. Each entry includes the title, publication details, and a link to the full text.

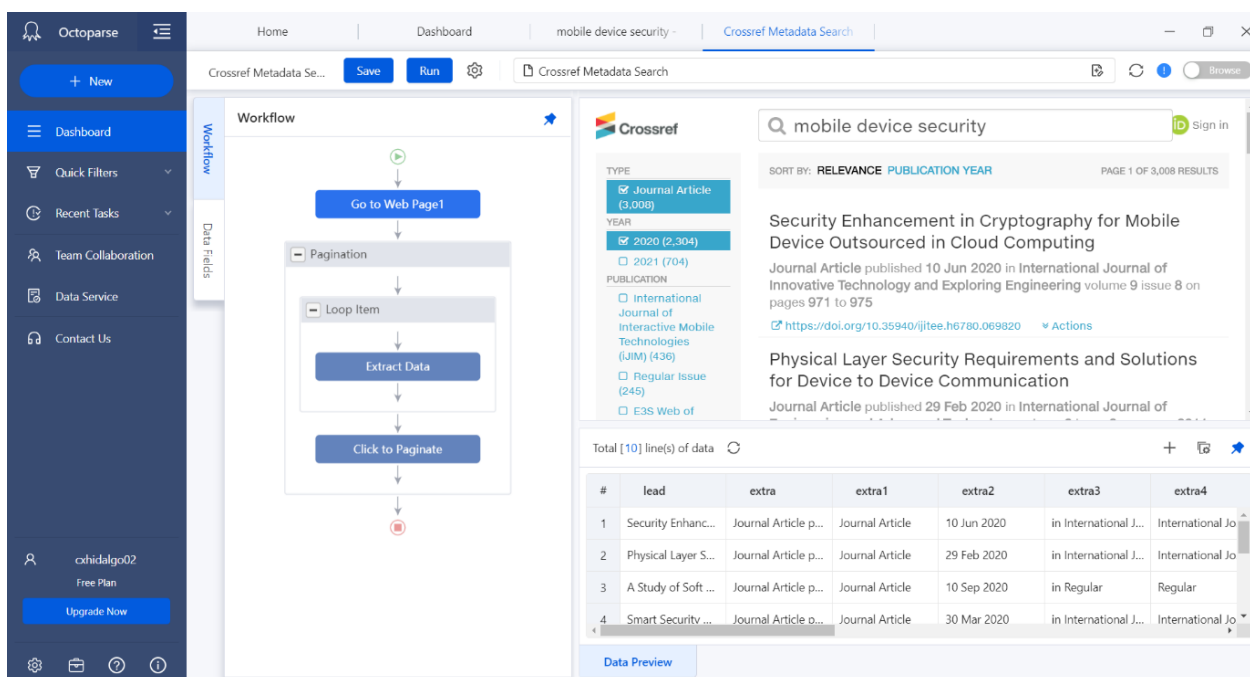
Método o Herramienta para extracción de datos

El método de extracción se hará scrapy a las páginas de **Google Academic**, **Crossef** y **Scimago**, con **Octoparse (Octopus Data)**; es una herramienta que permite realizar scrapy de forma masiva solo se ingresa el Url y se hace los filtros, una vez echo eso permite extraer la información del sitio web. Es una herramienta que permite extraer datos de una web, direcciones Ip, direcciones Ip de correo electrónico, precios, número de teléfonos móviles, extracto de imágenes, resumen y publicación de datos sobre casi cualquier sitio web y te permitirá guardarlos como datos estructurados limpios en tu formato de elección.



The screenshot shows the Octoparse interface with a workflow for extracting data from Google Academic. The workflow includes steps: Go to Web Page1, Pagination, Loop Item (containing Extract Data and Click to Paginate), and Click to Paginate. The right panel displays search results for 'mobile device security' on Google Academic, showing a list of articles and a table of extracted data.

#	Title	Title_URL	gs_a	gs_or_ggsm_URL	gs_or_ggsm
1	Predicting Bring...	https://search.proque...	D Crawford - 20...		
2	IT Managers' an...	https://search.proque...	T White - 2020 ~...		
3	An effective app...	https://www.scienced...	D Hayes, F Capp...	https://www.sciencedirect.com/s...	[HTML] science
4	Adaptive contex...	https://ieeexplore.iee...	P Nawrocki, B S...		



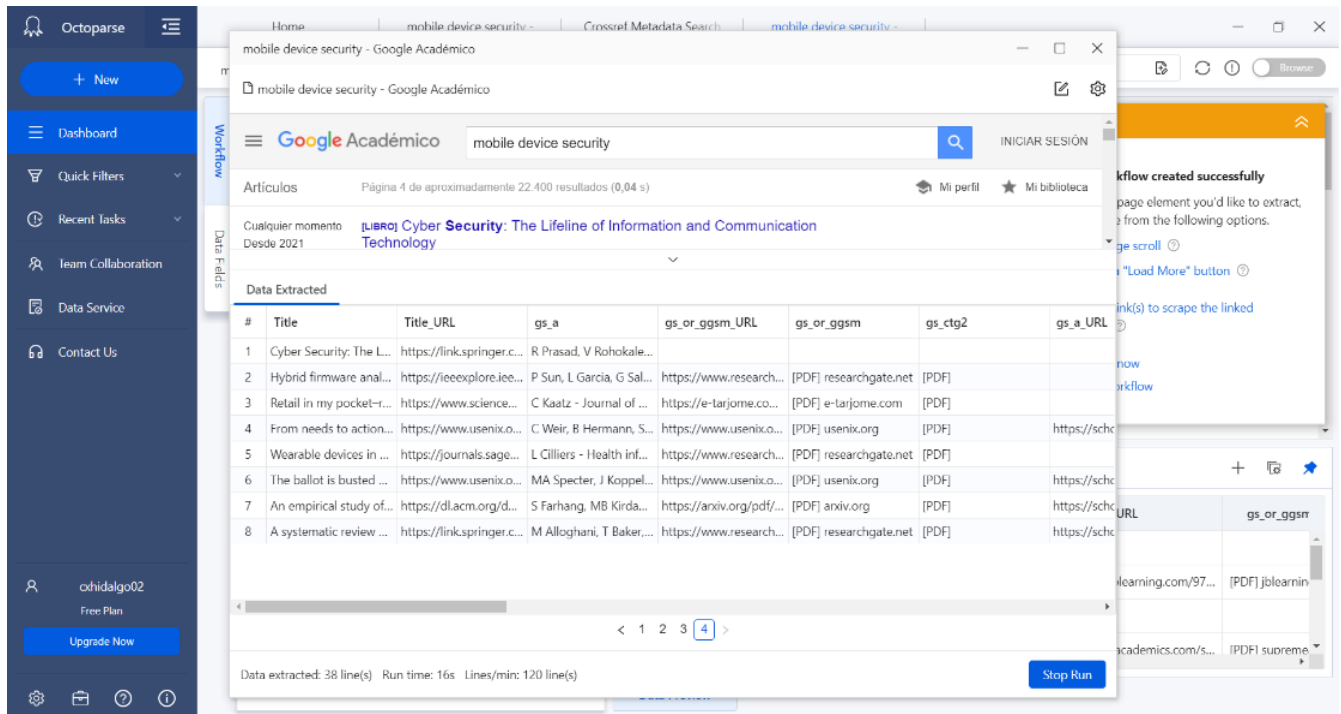
The screenshot shows the Octoparse interface with a workflow for extracting data from Crossref Metadata Search. The workflow includes steps: Go to Web Page1, Pagination, Loop Item (containing Extract Data and Click to Paginate), and Click to Paginate. The right panel displays search results for 'mobile device security' on Crossref, showing a list of articles and a table of extracted data.

#	lead	extra	extra1	extra2	extra3	extra4
1	Security Enhanc...	Journal Article p...	Journal Article	10 Jun 2020	in International J...	International Jo
2	Physical Layer S...	Journal Article p...	Journal Article	29 Feb 2020	in International J...	International Jo
3	A Study of Soft ...	Journal Article p...	Journal Article	10 Sep 2020	in Regular	Regular
4	Smart Security ...	Journal Article p...	Journal Article	30 Mar 2020	in International J...	International Jo

DATOS DESCARGADOS

Google Academic / 2020 – 2021

En Google academic se realizó la búsqueda de Artículos Científicos sobre Mobile Device security, ordenados, entre el 2020 y el 2021, dándonos como resultados aproximadamente 23.500 resultados (0,05 s)



The screenshot shows the Octoparse interface with a Google Academic search for 'mobile device security'. The search results are displayed in a table with columns: #, Title, Title_URL, gs_a, gs_or_ggsm_URL, gs_or_ggsm, gs_ctg2, and gs_a_URL. The table contains 8 rows of data, including articles from Springer, IEEE, and ScienceDirect.

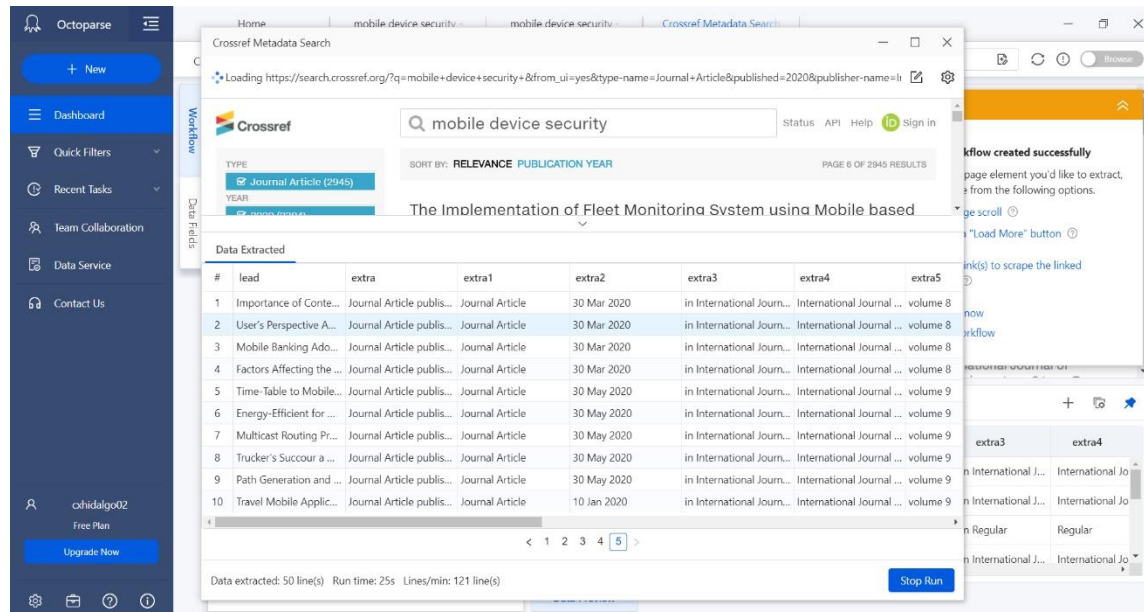
#	Title	Title_URL	gs_a	gs_or_ggsm_URL	gs_or_ggsm	gs_ctg2	gs_a_URL
1	Cyber Security: The L...	https://link.springer.c...	R Prasad, V Rohokale...	https://www.research...	[PDF] researchgate.net	[PDF]	
2	Hybrid firmware anal...	https://ieeexplore.iee...	P Sun, L Garcia, G Sal...	https://www.research...	[PDF] researchgate.net	[PDF]	
3	Retail in my pocket-r...	https://www.science...	C Kaatz - Journal of ...	https://e-tarjome.co...	[PDF] e-tarjome.com	[PDF]	
4	From needs to action...	https://www.usenix.o...	C Weir, B Hermann, S...	https://www.usenix.o...	[PDF] usenix.org	[PDF]	https://sch
5	Wearable devices in ...	https://journals.sage...	L Cilliers - Health inf...	https://www.research...	[PDF] researchgate.net	[PDF]	
6	The ballot is busted ...	https://www.usenix.o...	MA Specter, J Koppel...	https://www.usenix.o...	[PDF] usenix.org	[PDF]	https://sch
7	An empirical study of...	https://dl.acm.org/d...	S Farhang, MB Kirda...	https://arxiv.org/pdf/...	[PDF] arxiv.org	[PDF]	https://sch
8	A systematic review ...	https://link.springer.c...	M Alloghani, T Baker...	https://www.research...	[PDF] researchgate.net	[PDF]	https://sch

Data extracted: 38 line(s) Run time: 16s Lines/min: 120 line(s)

ARCHIVO INICIO INSERTAR DISEÑO DE PÁGINA FÓRMULAS DATOS REVISAR VISTA										
<div> <div> <div>Cortar</div> <div>Copiar</div> <div>Copiar formato</div> </div> <div> <div>Calibri</div> <div>12</div> <div>A</div> <div>A</div> </div> <div> <div>Ajustar texto</div> <div>General</div> <div>Combinar y centrar</div> </div> <div> <div>Formato condicional</div> <div>Dar formato como tabla</div> </div> <div> <div>Normal</div> <div>Buena</div> <div>Incorrecto</div> <div>Neutral</div> </div> <div> <div>Insertar</div> <div>Eliminar</div> <div>Formato</div> </div> <div> <div>Autosuma</div> <div>Rellenar</div> <div>Borrar</div> </div> <div> <div>Ordenar y filtrar</div> <div>Buscar y seleccionar</div> <div>Modificar</div> </div> </div>										
A	B	C	D	E	F	G	H	I	J	K
1	Title	Title_URL	gs_a	gs_or_ggsm_URL	gs_or_ggsm	gs_ctg2	gs_a_URL	gs_a1	gs_rs	gs_fl_URL
2	SelMon: reinforcing mobile devi	https://dl.acm.org/doi/abs/10.1145/3386901.3386901	J Jang, BB Kang - ... of the 18th Interna							https://schol Article
3	Mobile Device Security: Bring Yc	https://csrc.nist.gov/publications/detail/sp/1800-K Boeckl, N Grayson, G Howell, N Lefk								javascript:voi
4	Predicting Bring Your Own Device	https://search.proquest.com/openview/8f2cedba D Crawford - 2020 - search.proquest.co								https://schol Article
5	IT Managers' and IT Professiona	https://search.proquest.com/openview/0124fe0e T White - 2020 - search.proquest.com								https://schol Article
6	Mobile Device Security Issues in	https://papers.ssrn.com/sol3/papers.cfm?abstract=SAAM Ahmed - International Journal ch	http://ir.umk [PDF] umk.ed [PDF]						mobile	https://schol Article
7	An effective approach to mobile	https://www.sciencedirect.com/science/article/pii D Hayes, F Cappa, NA Le-Khac - Digital	https://www [HTML] scien [HTML]				https://schol NA Le-Khac			https://schol Article
8	Mobile device cyber security	https://link.springer.com/chapter/10.1007/978-3- R Prasad, V Rohokale - Cyber Security:					https://schol J Kolodziej		Mobile	https://schol Citado
9	Adaptive context-aware energy	https://ieeexplore.ieee.org/abstract/document/9 P Nawrocki, B Sniezynski, J Kolodziej...					https://schol M Guerroum		device's	https://schol Citado
10	Analyzing IoT users' mobile dev	https://www.sciencedirect.com/science/article/pii P Menard, G Bott - Computers & Secu					https://schol MS Islam		security	javascript:voi
11	Two-factor mutual authenticati	https://ieeexplore.ieee.org/abstract/document/8 A Derhab, M Belaoued, M Guerroumi, https://ieeex [PDF] ieee.or [PDF]					https://schol MS Islam		security	javascript:voi
12	Secure Mobile Application Deve	https://digitalcommons.kennesaw.edu/ccerp/202 H Shahriar, C Zhang, ABM ISLAM RIA					https://schol MS Islam		security	javascript:voi
13		J Doherty - 2021 - Jones & Bartlett Lea http://sampl [PDF] jblearn [PDF]								https://schol Citado
14	Employees' Cybersecurity Behav	https://ieeexplore.ieee.org/abstract/document/9 SF Verkijika - 2020 2nd International W							device	https://schol Las 2 ve
15	Zoom security issues: Here's eve	https://supremeacademics.com/samples/Informa P Wagenseil - Tom's Guide, 2020 - sup	https://supre [PDF] supren [PDF]						Security	https://schol Citado
16	Real-time task scheduling and n	https://www.sciencedirect.com/science/article/pii J Zhou - Microprocessors and Microsy							device	https://schol Citado
17	Survey on Security Issues in Mol	https://link.springer.com/chapter/10.1007/978-9ER Neware, K Ulabhaje, G Karemore... - https://www [PDF] preprin [PDF]							Security	https://schol Citado
18	Recent advances delivered in m	https://www.igi-global.com/chapter/recent-advar C Stergiou, KE Psannis - ... practices, ar	https://ruom [PDF] uom.gr [PDF]						security	https://schol Citado
19	Intelligent resource allocation i	https://scis.sichina.com/en/2021/162303.pdf Z Ning, S Sun, X Wang, L Guo, GY Wan	http://scis.sc [PDF] sichin [PDF]						mobile	https://schol Citado
20	Mobile Cloud Computing: Archi	https://dl.acm.org/doi/abs/10.1145/3386723.3386723 H Fellah, C Mezioud, MC Batouche - ...							device	https://schol Article
21	Security and privacy attacks dur	https://www.sciencedirect.com/science/article/pii V Moorthy, R Venkataraman, TR Rao -							device	https://schol Citado
22	FEATHER: A proposed lightweig	https://www.etasr.com/index.php/ETASR/article/v A Alamer, B Soh - Engineering, Techno	https://www [PDF] etasr.c [PDF]						security	https://schol Article
23	Slow-movement particle swarm	https://www.sciencedirect.com/science/article/pii Y Zhang, Y Liu, J Zhou, J Sun, K Li - Futu	http://www. [PDF] newpal [PDF]				https://schol K Li		device	https://schol Article
24	Security analysis of IoT devices	https://ieeexplore.ieee.org/abstract/document/9 B Liao, Y Ali, S Nazir, L He, HU Khan - IE	https://ieeex [PDF] ieee.or [PDF]						security	https://schol Citado
25	User authentication on mobile	https://www.sciencedirect.com/science/article/pii C Wang, Y Wang, Y Chen, H Liu, J Liu - https://www [PDF] science [PDF]					https://schol Y Chen		device	https://schol Citado
26	IoT Device security through dyn	https://www.sciencedirect.com/science/article/pii F Hategekimana, TJL Whitaker, MJH Pa								https://schol Citado
27	Effects of the design of mobile s	https://www.sciencedirect.com/science/article/pii D Wu, GD Moody, J Zhang, PB Lowry - https://www [PDF] researc [PDF]					https://schol J Zhang		Mobile	https://schol Citado
28	Efficient Mobile Security for E	https://link.springer.com/article/10.1007/s11063- A Saranya, R Naresh - Neural Processir							mobile	https://schol Citado

Crossref / 2020 – 2021

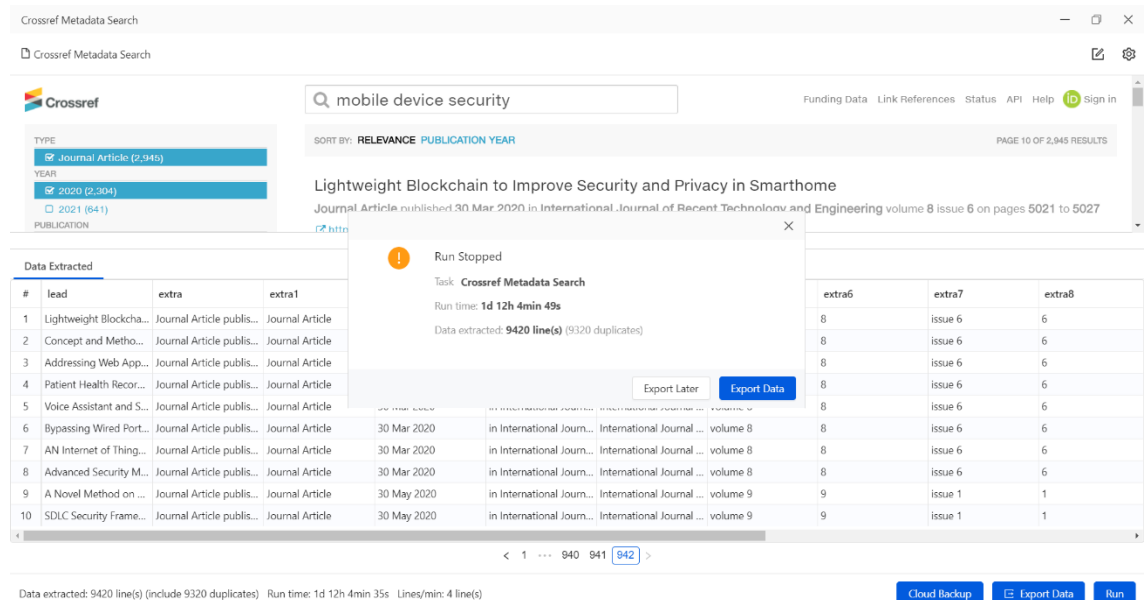
En Crossref se realizó la búsqueda de Artículos Científicos sobre Mobile Device security, ordenados, entre el 2020 y el 2021, publicadas el Institute of Electrical and Electronics Engineers (IEEE) (5,779), International Association of Online Engineering (IAOE) (463), Institution of Engineering and Technology (IET) (321) y Blue Eyes Intelligence Engineering and Sciences Engineering and Sciences Publication - BEIESP (299), esto nos da como resultado aproximadamente 58.102 resultados.



The screenshot shows the Octoparse interface with a workflow for Crossref Metadata Search. The search query is 'mobile device security'. The results are sorted by Relevance and Publication Year. The data extracted table shows the following columns: #, lead, extra, extra1, extra2, extra3, extra4, extra5.

#	lead	extra	extra1	extra2	extra3	extra4	extra5
1	Importance of Conte...	Journal Article publis...	Journal Article	30 Mar 2020	in International Journ...	International Journal ...	volume 8
2	User's Perspective A...	Journal Article publis...	Journal Article	30 Mar 2020	in International Journ...	International Journal ...	volume 8
3	Mobile Banking Ado...	Journal Article publis...	Journal Article	30 Mar 2020	in International Journ...	International Journal ...	volume 8
4	Factors Affecting the ...	Journal Article publis...	Journal Article	30 Mar 2020	in International Journ...	International Journal ...	volume 8
5	Time-Table to Mobile...	Journal Article publis...	Journal Article	30 May 2020	in International Journ...	International Journal ...	volume 9
6	Energy-Efficient for ...	Journal Article publis...	Journal Article	30 May 2020	in International Journ...	International Journal ...	volume 9
7	Multicast Routing Pr...	Journal Article publis...	Journal Article	30 May 2020	in International Journ...	International Journal ...	volume 9
8	Trucker's Succour a ...	Journal Article publis...	Journal Article	30 May 2020	in International Journ...	International Journal ...	volume 9
9	Path Generation and ...	Journal Article publis...	Journal Article	30 May 2020	in International Journ...	International Journal ...	volume 9
10	Travel Mobile Applic...	Journal Article publis...	Journal Article	10 Jan 2020	in International Journ...	International Journal ...	volume 9

Data extracted: 50 line(s) Run time: 25s Lines/min: 121 line(s)



The screenshot shows the Octoparse interface with a workflow for Crossref Metadata Search. The search query is 'mobile device security'. The results are sorted by Relevance and Publication Year. The data extracted table shows the following columns: #, lead, extra, extra1, extra6, extra7, extra8.

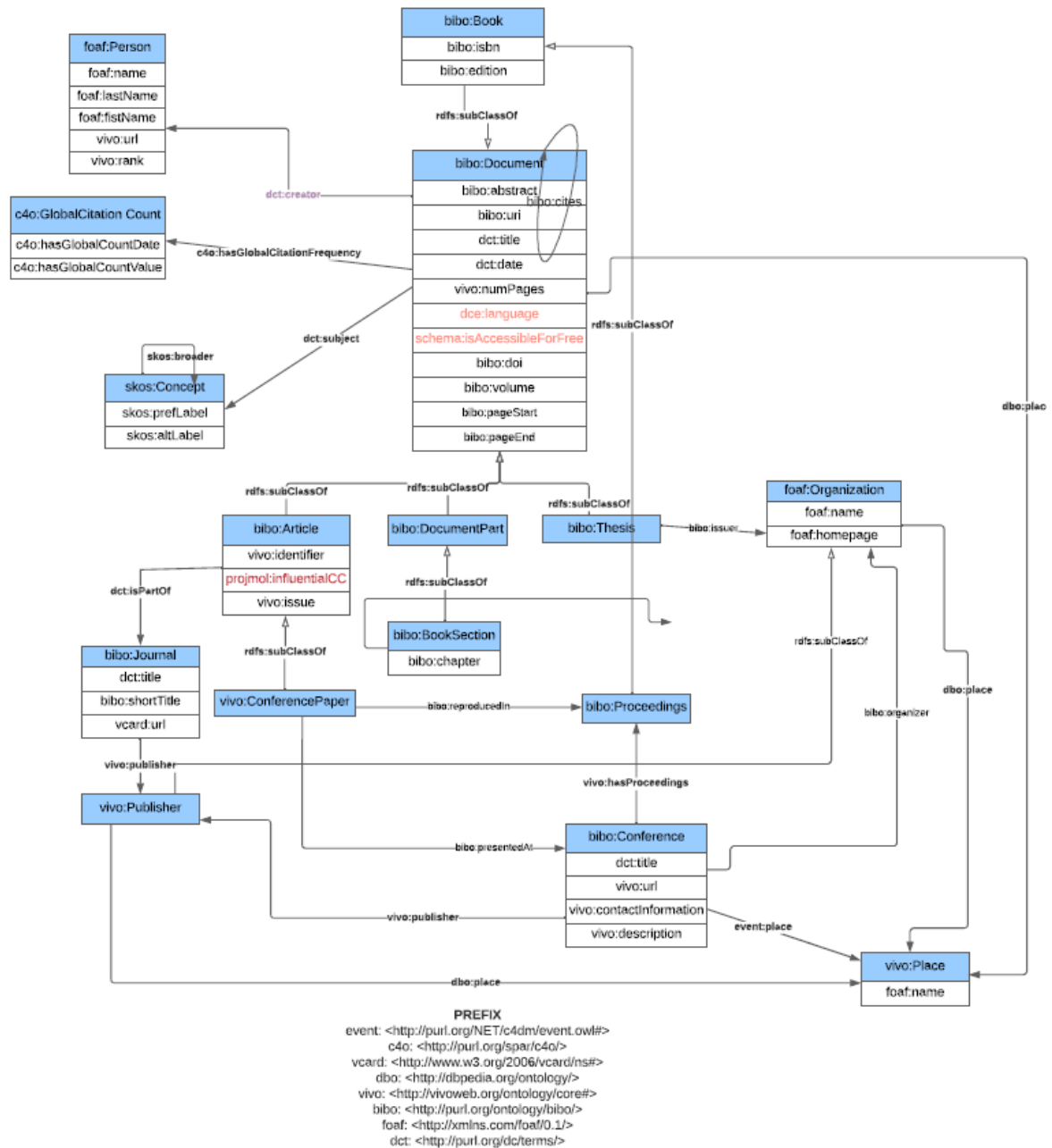
#	lead	extra	extra1	extra6	extra7	extra8
1	Lightweight Blockcha...	Journal Article publis...	Journal Article			
2	Concept and Metho...	Journal Article publis...	Journal Article			
3	Addressing Web App...	Journal Article publis...	Journal Article			
4	Patient Health Recor...	Journal Article publis...	Journal Article			
5	Voice Assistant and S...	Journal Article publis...	Journal Article			
6	Bypassing Wired Port...	Journal Article publis...	Journal Article	30 Mar 2020	in International Journ...	International Journal ...
7	AN Internet of Thing...	Journal Article publis...	Journal Article	30 Mar 2020	in International Journ...	International Journal ...
8	Advanced Security M...	Journal Article publis...	Journal Article	30 Mar 2020	in International Journ...	International Journal ...
9	A Novel Method on ...	Journal Article publis...	Journal Article	30 May 2020	in International Journ...	International Journal ...
10	SDLC Security Frame...	Journal Article publis...	Journal Article	30 May 2020	in International Journ...	International Journal ...

Data extracted: 9420 line(s) (include 9320 duplicates) Run time: 1d 12h 4min 35s Lines/min: 4 line(s)

Run Stopped
Task: Crossref Metadata Search
Run time: 1d 12h 4min 49s
Data extracted: 9420 line(s) (9320 duplicates)

La herramienta a trabajar con los datos descargados es **OpenRefine**: Es una herramienta que permita trabajar con datos desordenados, permite limpiarlos, transformar datos, OpenRefine es una herramienta que mantiene la privacidad de los datos en la propia computadora hasta que uno desee compartirlas o brindar colaboración de los mismos. [Link: https://openrefine.org/](https://openrefine.org/)

DIAGRAMA



Definición de URIs y preparación de datos origen. Indicar qué criterios consideraron para asignar o generar las URIs de los diferentes recursos.

Prefijos:

dataPrefix = <http://proyecto.org/sbc/>
 vcard = <http://www.w3.org/2006/vcard/ns/>
 dbo = <http://dbpedia.org/ontology/>
 vivo = <http://vivoweb.org/ontology/>
 bibo = <http://purl.org/ontology/bibo/>
 foaf = <http://xmlns.com/foaf/0.1/>
 dct = <http://purl.org/dc/terms/>

Transformación y almacenamiento de datos RDF.

- **Tabla resumen de datos recolectados:** Por cada clase del modelo ontológico indicar cuántas instancias generaron.

bibo:Document	foaf:Person	foaf:Organization
bibo:abstract	foaf:name	foaf:name
bibo:cites	foaf:lastName	foaf:homePage
dcterms:references	foaf:firstName	
bibo:uri	vivo:url	
dct:title		
dce:lenguaje		

- **Pre-procesamiento de datos:** Indicar qué tareas de limpieza o transformación de datos realizaron antes de generar RDF.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Title	gs_or_ggsm	gs_or_ggsm	gs_ctg2	gs_ct1	gs_rt	gs_rt1	gs_a	gs_a_URL	gs_a2	gs_a_URL3	gs_a4	gs_rs	gs_rs5	gs_rs6	gs_rs7
2		http://sampl	[PDF]	jblearn	[PDF]	[CITAS]		J Doherty - 2f								
3	A theoretical	https://ieeex					mobile	MA Joseph, S					... 1) Attacks	mobile	device	security
4	Intelligent re	http://scis.sc	http://scis.sc	[PDF]	scichini	[PDF]	mobile	Z Ning, S Sun	https://schol Z Ning		https://schol X Wang		... In this pap	mobile	security	mobile
5	Security Issu	https://www	https://www	[PDF]	research	[PDF]	Security	EOC Mkpojio	https://schol EOC Mkpojio	https://schol A Hussain		... This sectio	security	mobile	security	security
6	Proof-of-PUF	https://www	https://www	[PDF]	mdpi.ci	[PDF]	device securi	R Asif, K Gha	https://schol R Asif	https://schol K Ghanem		... into a futu	mobile	device	security	security
7	The Influen	https://ieeex					Mobile	M Butler, R B	https://schol M Butler	https://schol R Butler		... Inf. Techno	Security	mobile	device	device
8	Survey on m	https://ieeex					security	P Ranaweera	https://schol P Ranaweera	https://schol AD Jurcut		... A typical ir	device	Mobile	security	security
9	Exploring the	https://www	https://www	[PDF]	academ	[PDF]	security	A Saxena, DS				... The data c	mobile	security	mobile	mobile
10	An Efficient L	https://www	https://www	[PDF]	mdpi.ci	[PDF]	Mobile	Y Li, X Yun, L	https://schol L Fang	https://schol C Ge		... At present,	mobile	security	security	security
11	Method for c	https://open	https://open	[PDF]	nure.ui	[PDF]	mobile	MA Hunko, D	https://schol MA Hunko			... to study th	mobile	device	device	device
12	Mobile Secur	https://journ	https://journ	[PDF]	umy.ac	[PDF]	Mobile Secur	M Husni, RV	https://schol RVH Ginardi			... Hardware i	device	Mobile	Security	Security
13	Mobile and C	https://link.s					Mobile	F Muheidat -	https://schol F Muheidat			... as additio	device	device	security	mobile
14	Understandi	https://www	https://www	[PDF]	research	[PDF]	security	Q Xiao - Telei				... 69,777 nev	mobile	mobile	device	device
15	Current Rese	https://www	https://www	[HTML]	hindi	[HTML]	Security	JY Lee, J Lee				... current tre	security	security	device	device
16	A survey on s	https://www	https://www	[PDF]	research	[PDF]	security	V Mothukuri,	https://schol V Mothukuri	https://schol RM Parizi		... INDEX TERI	security	mobile	device	device
17	Enhancing se	https://ieeex	https://ieeex	[PDF]	ieeex.or	[PDF]	mobile	M Shabbir, A	https://schol C Iwendi	https://schol AR Javed		... The remain	security	Mobile	mobile	mobile
18	Timed Auton	https://130.1	https://130.1	[PDF]	130.14	[PDF]	Mobile	F Mercaido, F	https://schol F Mercaido	https://schol A Santone		... 5g-networl	device	Security	Mobile	Mobile
19	An Attack Ve	https://www					Mobile	M Lanoue, C	https://schol CA Bollmann	https://schol JB Michael		... a self-prot	Mobile	mobile	device	device
20	A Self-prot	https://www	https://www	[PDF]	scitepr	[PDF]	Mobile	RR Martins, f				... Keeping cu	Mobile			
21	Keeping cust	https://www					Mobile	N Ameen, A	https://schol N Ameen	https://schol A Tarhini		... FUTURE W	mobile	device	mobile	mobile
22	Proxy-Assis	https://ieeex					Mobile	S Fugkeaw, P	https://schol S Fugkeaw			... Perception	mobile	device	security	security
23	Smart Phone	https://www					Security	SE Mensch, L	https://schol SE Mensch			... devices pa	security	Mobile	Device	Device
24	Profiling Ins	https://pape					Mobile Devic	D Van Dijke,	https://schol D Van Dijke	https://schol AL Wright		... networkin	security	mobile	device	device
25	A Compreher	http://myjms	http://myjms	[PDF]	mohe.g	[PDF]	Security	NA Razak, HK				... Ponemon I	mobile	Device	security	security
26	Ask a (n) dro	https://link.s	https://www	[PDF]	cnr.it	[PDF]	security	A Aldini, A La	https://schol A Aldini	https://schol A La Marra		... Here, we v	mobile	device	mobile	mobile
27	A Compariso	https://link.s					Mobile	W Asghari, A	https://schol AS Kumar			... In this sect	security	mobile	device	device
28	Mobile Appli	https://link.s					Mobile	H Shahriar, C	https://schol H Shahriar	https://schol C Zhang						

ID	TITULO	ABSTRACT	NUM_DOC	TECHNOL.	NUM_CITAS	AUTOR_1	AUTOR_2	AUTOR_3	TIPO	ACM	URL
DOCM051	Self-Monoreinforcing mobile-privileged trust	https://dl.acm.org/doc/doi/abs/10.1145/june.2020	13pag.		Citado_por_5	J. Jiang	BB. Kang		HTML	acm	https://dl.acm.org/doc/doi/abs/10.1145/june.2020
DOCM052	Mobile Device Security: Abstract Bring Your Own	https://csrc.nist.gov/publications/doc/2020	266pag.		Citado_por_2	K. Boeckl	N. Grayson	G. Howell	HTML	csrc nist	https://csrc.nist.gov/publications/doc/2020
DOCM053	Predicting Bring Your Own the implementation of	https://search.proquest.com/openview/june.2020	24pag.			Articulos_relacion_D	Crawford		PDF	search proquest	https://search.proquest.com/openview/june.2020
DOCM054	IT Managers_and IT_Pt the purpose of this	https://search.proquest.com/openview/june.2020	24pag.			Articulos_relacion_T	White		PDF	search proquest	https://search.proquest.com/openview/june.2020
DOCM055	Mobile Device Security: mobile security, or	https://papers.ssrn.com/sol3/cf.cfm?abstract_id=3585755	11pag.			Articulos_relacion_SAM	Alameddine		PDF	papers ssrn	https://papers.ssrn.com/sol3/cf.cfm?abstract_id=3585755
DOCM056	An effective approach to consumer organ	https://www.sciencedirect.com/science/article/pii/S0167404820300000	24pag.	https://scholar	Citado_por_7	D. Hayes	F. Coppo	NA, ie-khac	HTML	https://www.sciencedirect.com/science/article/pii/S0167404820300000	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM057	Mobile device cyber_in 21st century, view_all	https://link.springer.com/chapter/10.1007/978-1-4939-9999-9_10	2019		Citado_por_1	R. Prasad	V. Rohokale		HTML	link springer	https://link.springer.com/chapter/10.1007/978-1-4939-9999-9_10
DOCM058	Adaptive content-aware show that due to the	https://ieeexplore.ieee.org/abstract/ma	112pag.	https://scholar	Citado_por_3	P. Nawrocki	B. Sniezynski	J. Kolodziej	IEEEexplore ieee	https://ieeexplore.ieee.org/abstract/ma	https://ieeexplore.ieee.org/abstract/ma
DOCM059	Analyzing IoT_users _m the advent of the Inter	https://www.sciencedirect.com/science/article/pii/S0167404820300000	24pag.		Citado_por_4	P. Menard	G. Brott		HTML	https://www.sciencedirect.com/science/article/pii/S0167404820300000	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM060	Two-factor mutual_auth smart_cards, We_also	https://ieeexplore.ieee.org/abstract/summary	12pag.	https://scholar	Citado_por_8	A. Derhab	M. Belouaced	M. Gueurmou	IEEEexplore ieee	https://ieeexplore.ieee.org/abstract/summary	https://ieeexplore.ieee.org/abstract/summary
DOCM061	Secure Mobile Application's mobile devices	https://digitalcommons.kennesaw.edu/june.2020	24pag.	https://scholar		H. Shahrah	C. Zhang	MS, Islam	digitalcommons.kennesaw.edu	https://digitalcommons.kennesaw.edu/june.2020	https://digitalcommons.kennesaw.edu/june.2020
DOCM062	Secure Mobile Application's mobile devices	https://www.sciencedirect.com/science/article/pii/S0167404820300000	14pag.		Citado_por_17	J. Doherty			HTML	https://www.sciencedirect.com/science/article/pii/S0167404820300000	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM063	Employees _Cybersecr Using an online survey	https://www.sciencedirect.com/science/article/pii/S0167404820300000	20pag.		Citado_por_30	S.F. Verkliska			PDF	IEEEexplore ieee	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM064	Zoom security issues: A Job's Life Survey	https://supremeademics.com/sam/june.2020	13pag.		Citado_por_10	P. Wagnell			PDF	supremeademics.com	https://supremeademics.com/sam/june.2020
DOCM065	Real-time task scheduling infrastructure of point	https://www.sciencedirect.com/science/article/pii/S0167404820300000	11pag.		Citado_por_21	J. Zhou			PDF	https://www.sciencedirect.com/science/article/pii/S0167404820300000	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM066	Survey on Security_Issu 5.5 Mobile Device Secu	https://link.springer.com/chapter/10.1007/978-1-4939-9999-9_10	12pag.		Citado_por_2	R. Neware	K. Ulabajra	G. Karemore	PDF	link springer	https://link.springer.com/chapter/10.1007/978-1-4939-9999-9_10
DOCM067	Recent advances_delivery infrastructure and to	https://www.sciencedirect.com/science/article/pii/S0167404820300000	23pag.		Citado_por_5	C. Stergiou	IG. Pnams		PDF	ig-global	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM068	Intelligent resource_also _in this paper we_w	https://www.sciencedirect.com/science/article/pii	16pag.		Citado_por_4	Z. Ning	X. Wang	S. Sun	PDF	scis scischna	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM069	Mobile Cloud _m the ma	https://dl.acm.org/doc/doi/abs/10.1145/june.2020	80pag.		Citado_por_8	H. Kell	C. Maroudis	MC. Batouche	PDF	https://dl.acm.org/doc/doi/abs/10.1145/june.2020	https://dl.acm.org/doc/doi/abs/10.1145/june.2020
DOCM070	Security_and_privacy_attacking technologies	https://www.sciencedirect.com/science/article/pii/S0167404820300000	2019		Citado_por_8	R. Venkataraman	TR. Rao		PDF	https://www.sciencedirect.com/science/article/pii/S0167404820300000	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM071	FEATHER_A proposed Ji_B UPDATE in the mc	https://www.etasr.com/index.php/IET_june.2020	9pag.		Citado_por_12	A. Hamel	B. Sra		PDF	etasr	https://www.etasr.com/index.php/IET_june.2020
DOCM072	Slow-movement_particle _in this scenario, is	https://www.sciencedirect.com/science/article/pii/S0167404820300000	22pag.	https://scholar	Citado_por_6	J. Zhou	J. Sun	K. Li	PDF	sciencedirect	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM073	Security_analysis_of IoT _PHONET_WHAT ARE	https://ieeexplore.ieee.org/abstract/july.2020	18pag.		Citado_por_21	S. Nazir	HU. Khan		PDF	IEEEexplore ieee	https://ieeexplore.ieee.org/abstract/july.2020
DOCM074	User_authentication_on _number) on the mot	https://www.sciencedirect.com/science/article/pii/S0167404820300000	41pag.	https://scholar	Citado_por_12	C. Wang	Y. Wang	Y. Chen	PDF	sciencedirect	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM075	IoT_Device security_thro _IoT_Device security	https://www.sciencedirect.com/science/article/pii/S0167404820300000	40pag.		Citado_por_6	M. Pantho			PDF	sciencedirect	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM076	Effectiveness_of security _in this paper we_w	https://www.sciencedirect.com/science/article/pii/S0167404820300000	10pag.	https://scholar	Citado_por_1	D. Wu	GD. Moody	J. Zhang	PDF	https://www.sciencedirect.com/science/article/pii/S0167404820300000	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM077	Efficient_Mobile_Security _unconfident, such	https://link.springer.com/article/10.1007/978-1-4939-9999-9_10	12pag.		Citado_por_1	A. Saranya	R. Nareesh		PDF	link springer	https://link.springer.com/article/10.1007/978-1-4939-9999-9_10
DOCM078	Data_Security_in_Mobile _But still, numerous	https://www.researchgate.net/profile/july.2020	10pag.		Citado_por_4	R. Gayum	H. Ejaz		PDF	researchgate	https://www.researchgate.net/profile/july.2020
DOCM079	Attack_and_system_mod _Patrie-Cambridge	https://dl.acm.org/doc/doi/abs/10.1145/june.2020	9pag.		Citado_por_6	JBF Sequeiros	MG Samala	FT Chimusco	PDF	acm	https://dl.acm.org/doc/doi/abs/10.1145/june.2020
DOCM080	Security_analysis_of the _detail and then, desc	https://eprint.iacr.org/2020/428.pdf	22pag.		Citado_por_42	Y. Gvili			PDF	eprint iacr	https://eprint.iacr.org/2020/428.pdf
DOCM081	Cyber_Security_The_Life _We are on the verge	https://link.springer.com/content/pdf/10.1007/978-1-4939-9999-9_10	80pag.		Citado_por_13	R. Prasad	V. Rohokale		PDF	link springer	https://link.springer.com/content/pdf/10.1007/978-1-4939-9999-9_10
DOCM082	Hybrid_Firmware_analysis _The regular applica	https://ieeexplore.ieee.org/abstract/july.2020	46pag.		Citado_por_3	S. Prasad			PDF	IEEEexplore ieee	https://ieeexplore.ieee.org/abstract/july.2020
DOCM083	Feasibility_of _m the _hypothesis	https://www.sciencedirect.com/science/article/pii/S0167404820300000	56pag.		Citado_por_15	C. Khat			PDF	https://www.sciencedirect.com/science/article/pii/S0167404820300000	https://www.sciencedirect.com/science/article/pii/S0167404820300000
DOCM084	From needs to actions _Abstract Increasingly	https://www.usenix.org/conference/abstract/October.2020	24pag.		Citado_por_8	C. Weir	B. Hermann	S. Fahd	PDF	usenix	https://www.usenix.org/conference/abstract/October.2020

Como se puede observar en el **grafico 1**, los datos están desordenados, datos repetidos, tenían caracteres especiales, datos que no llegaban al tema, por lo cual se procedió a revisar minuciosamente los datos que serían relevantes al tema, como es Título, resumen, url del documento o página, fecha de publicación, número de páginas, lenguaje, referencia de autores, numero de citas, autores, nombre de socios u organizaciones, url del socio u organización. Conforme esas variables se fue ordenando las columnas, clasificando, eliminando los datos y columnas repetidas o columnas que estaban fuera del tema, una vez ya lista las columnas con las que se trabajara, se procedió a realizar la limpieza de datos en la cual consiste sacar caracteres y símbolos especiales. Una vez echo se revisó que en cada variable tenga su separador (la coma ,) esto nos servirá para al momento de correr el programa, saber que entre coma y coma se almacenara en una variable o arreglo, para luego ser procesado. En el **grafico 2** se puede observar que los datos están listos para ser procesados.

- **Transformación de datos:** Indicar la lógica del motor de transformación de datos basado en Jena. En este punto se puede indicar algún esquema que resuma los métodos y demás objetos que se implementaron.

La aplicación que se realizara será en el entorno Java, será una aplicación que permita leer archivos csv o excel, al momento de leer cada fila se almacenara en un arreglo en la cual tendrá un separador que es la coma (,) al detectar el separador, se ira agregando en otra variables cada, código, url, frase o palabra, para luego ir armando las tripletas según el valor de la variable.

File, OI BufferedReader, IO BufferedWriter, estas librerías permiten trabajar con documentos Microsoft en creación, escritura y lectura. Esa librería se la utilizara para la lectura de los archivos generados anteriormente por la herramienta OctoParse, específicamente un archivo csv donde se alojan todos la data.

Jena dentro del código java es una librería, que nos facilita código para realizar la generación de tripletas en diferentes formatos, XML, JSON, N3-Triples, etc.

```

}
public static void main(String[] args) throws FileNotFoundException, IOException {

    BufferedReader br = null;
    Model model = ModelFactory.createDefaultModel();
    File f = new File("C:\\Users\\DELL\\Desktop\\dataEjemplo.rdf"); //Fijar ruta donde se crea
    FileOutputStream os = new FileOutputStream(f);

    String dataPrefix = "http://proyecto.org/sbc/data/";
    model.setNsPrefix("myData", dataPrefix);

    //Fijar prefijos de vocabularios incorporados en Jena
    String event = "http://purl.org/NET/c4dm/event.owl/";
    model.setNsPrefix("event", event);
    String c4o = "http://purl.org/spar/c4o/";
    model.setNsPrefix("c4o", c4o);
    String vcard = "http://www.w3.org/2006/vcard/ns/";
    model.setNsPrefix("vcard", vcard);
    String dbo = "http://dbpedia.org/ontology/";
    model.setNsPrefix("dbo", dbo);
    String vivo = "http://vivoweb.org/ontology/";
    model.setNsPrefix("vivo", vivo);
    String bibo = "http://purl.org/ontology/bibo/";
    model.setNsPrefix("bibo", bibo);
    String foaf = "http://xmlns.com/foaf/0.1/";
    model.setNsPrefix("foaf", foaf);
    String
        dct = "http://purl.org/dc/terms/";
    model.setNsPrefix("dct", dct);

    Model dboModel = ModelFactory.createDefaultModel(); // modelo para la ontología
    dboModel.read(dbo);

    String auxa = null;
    String[] datos = null;

    try {

        br = new BufferedReader(new FileReader("C:\\Users\\DELL\\Desktop\\dataEjemplo.csv"));
        String line = br.readLine();
        line = br.readLine();
        //System.out.println("--- LEYO Y EXTRAJO DATOS DEL ARCHIVO");
        while (null != line) {
            String[] fields = line.split(SEPARATOR);
            fields = removeTrailingQuotes(fields);
            datos = fields;

            String DocumentUri = dataPrefix + String.format(datos[0]);
            /* datos guardados, solo colocar el dato del array */
            /* DOCUMENT */
            String idDoc = datos[0];
            String tituloDoc = datos[1];
            String abstractDoc = datos[2];
            String uriDoc = datos[3];
            String fechaDoc = datos[4];
            String numPagesDoc = datos[5];
            String lenguajeDoc = datos[6];
            String citasDoc = datos[7];
            String humCitasDoc = datos[8];
            /* PERSON */
            String namePer = datos[9];
            String namePer2 = datos[10];
            String namePer3 = datos[11];
            /* ORGANIZATION */
            String nameOrg = datos[12];
            String urlOrg = datos[13];
            String tipoDoc = datos[14];
        }
    }
}

```



```
//System.out.println("--- DOCUMENT");
Resource documento = model.createResource(DocumentUri)
.addProperty(RDF.type, dboModel.getResource (bibo + "Document"))
.addProperty(dboModel.getProperty(bibo, "identifier"), idDoc) //bibo:identifier
.addProperty(DCTerms.title, tituloDoc) //dct:title
.addProperty(dboModel.getProperty(bibo, "abstract"), abstractDoc) //bibo:abstrac
.addProperty(dboModel.getProperty(bibo, "uri"), uriDoc) //bibo:uri
.addProperty(DCTerms.date, fechaDoc) // dct:date
.addProperty(dboModel.getProperty(bibo, "numPages"), numPagesDoc) //bibo:doi
.addProperty(DCTerms.language, lenguajeDoc) //dce:lenguaje
.addProperty(dboModel.getProperty(bibo, "cites"), citasDoc); //bibo:doi

//System.out.println("--- PERSON");
Resource person = model.createResource(dataPrefix + namePer)

.addProperty(RDF.type, FOAF.Person)
.addProperty(DCTerms.creator, dboModel.getResource (bibo + "Document/"+idDoc))
.addProperty(FOAF.name, namePer);

//System.out.println("--- ORGANIZATION");
Resource organization = model.createResource(dataPrefix + nameOrg)

.addProperty(RDF.type, FOAF.Organization)
.addProperty(dboModel.getProperty(bibo, "issuer"), (bibo + "Document/"+idDoc)) //bibo:identifier
.addProperty(FOAF.name, nameOrg) //foaf:name
.addProperty(FOAF.homepage, urlOrg) //foaf:homePage
.addProperty(DCTerms.description, tipoDoc); //DCTemrs.description

line = br.readLine();
}

} catch (Exception e) {

} finally {
    if (null != br) {
        br.close();
    }
}

}

StmtIterator iter = model.listStatements();
// print out the predicate, subject and object of each statement
while (iter.hasNext()) {
    Statement stmt = iter.nextStatement(); // get next statement
    Resource subject = stmt.getSubject(); // get the subject
    Property predicate = stmt.getPredicate(); // get the predicate
    RDFNode object = stmt.getObject(); // get the object
    System.out.print(subject.toString());
    System.out.print(" " + predicate.toString() + " ");

    if (object instanceof Resource) {
        System.out.print(object.toString());
    } else {
        // object is a literal
        System.out.print(" \"" + object.toString() + "\"");
    }

    System.out.println(" .");
}

System.out.println("MODELO RDF-----");
model.write(System.out, "RDF/XML");
// Save to a file
RDFWriterI writer = model.getWriter("RDF/XML"); //RDF/XML - N-TRIPLE
writer.write(model, "os", "");

dboModel.close();
model.close();
```

Logica: la aplicación Java lo que hace es leer el archivo csv, la manera en leer el archivo lo realiza de fila en fila; dentro de la lógica lo que hace es utilizar un separador, que en este caso es una coma (,) de ahí lo que hace es ir almacenando en un array, en la cual después cada valor de cada celda del array se almacena en una variable, el siguiente paso es crear el recurso, y se va asignando cada una de las propiedades con las variables que tienen el valor guardado del array, posterior a eso se llama al recurso subject, predicate y object; para empezar a presentar la tripleta y luego ser presentada en diferentes formatos, el que se va a utilizar es "RDF/XML" y "N-Triplet".

- **Almacenamiento:** indicar cuál fue el repositorio utilizado para almacenar los datos y las razones para realizar tal elección.

La base de datos utilizada para el almacenamiento de los datos pre-procesados es **MySQL** así mismo para guardar los datos ya procesados (tripletas)

La tabla para almacenar los datos **pre-procesados** queda de la siguiente manera:

ID	TITULO	ABSTRACT	URL DOC	FECHA	NUM PAG	LEN	CITAS	NUM CITAS	AUTOR	TIPO	SOCIO	URL

La tabla para almacenar los datos ya **procesados** (tripletas) queda de la siguiente manera:

Sujeto	Predicado	Objeto

Ejemplo tripletas

De esta manera podemos ver detenidamente como se forman las tripletas, con el código ya implementado.

```
<http://proyecto.org/sbc/data/DOCMDS1> <http://purl.org/ontology/bibo/identifier> "DOCMDS1" .
<http://proyecto.org/sbc/data/DOCMDS1> <http://purl.org/dc/terms/language> "en" .
<http://proyecto.org/sbc/data/DOCMDS1> <http://purl.org/dc/terms/title> "SelMon:reinforcing mobile
device security with self protected trust anchor" .
<http://proyecto.org/sbc/data/DOCMDS1> <http://purl.org/ontology/bibo/uri>
"https://dl.acm.org/doi/abs/10.1145/3386901.3389023" .
<http://proyecto.org/sbc/data/DOCMDS1> <http://purl.org/dc/terms/date> "June 2020" .
<http://proyecto.org/sbc/data/DOCMDS1> <http://purl.org/ontology/bibo/abstract> "Higher privileged trust
anchors such as thin hypervisors and TrustZone have been adopted to protect mobile OSs. For instance the
Samsung Knox security platform implements a kernel integrity monitor based on a hardware-assisted
virtualization technique for 64-bit" .
<http://proyecto.org/sbc/data/DOCMDS1> <http://purl.org/ontology/bibo/numPages> "13pag" .
<http://proyecto.org/sbc/data/DOCMDS1> <http://purl.org/ontology/bibo/numCites> "Citado por 5" .
<http://proyecto.org/sbc/data/DOCMDS1> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://purl.org/ontology/bibo/Document> .
<http://proyecto.org/sbc/data/J_Jang> <http://xmlns.com/foaf/0.1/name> "J Jang" .
<http://proyecto.org/sbc/data/J_Jang> <http://purl.org/dc/terms/creator>
<http://purl.org/ontology/bibo/Document/DOCMDS1> .
<http://proyecto.org/sbc/data/J_Jang> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://xmlns.com/foaf/0.1/Person> .
<http://proyecto.org/sbc/data/acm> <http://purl.org/dc/terms/description> "HTML" .
<http://proyecto.org/sbc/data/acm> <http://xmlns.com/foaf/0.1/homepage> "https://dl.acm.org" .
<http://proyecto.org/sbc/data/acm> <http://xmlns.com/foaf/0.1/name> "acm" .
<http://proyecto.org/sbc/data/acm> <http://purl.org/ontology/bibo/issuer>
"http://purl.org/ontology/bibo/Organization/DOCMDS1" .
<http://proyecto.org/sbc/data/acm> <http://www.w3.org/1999/02/22-rdf-syntax-ns#type>
<http://xmlns.com/foaf/0.1/Organization> .
```

- ***Enlazado post-transformación:*** incluir cuántas tripletas adicionales se encontraron en DBPedia y qué metadatos se anotaron (podría ser extendido).