Default Report

Algorithmic Awareness

October 27, 2019 11:22 PM MDT

Q1 - What is your definition of an algorithm?

What is your definition of an algorithm?
A formula of sorts that is intended to combine data sources into an answer to some question
Set of parameters or rules that processes inputs to determine 'relevancy' of outputs.
An algorithm is a behind the scene kinda of entity that is either feed information or is taught to make connections to provide the public with a better service.
A computer program that takes some type of input and transforms it into output.
An algorithm is a list of steps to be followed.
A computer process meant to identify patterns
A set of rules for working through data input
a pattern-based mathematical application to help determine possible outcomes of something
A series of discrete instructions to complete a task (often applied in a computing environment)
A statistical calculation created for a specific purpose
A computer program which is designed to process data in a certain mathematical way.
a standardized method (such as a formula)
A computer script or program that sorts a large pool of data into different categories based on instructions given to it by a programmer, the categories then have different outcomes assigned to them. Oftentimes the human intervention ends after the original programming
a mathematical model of real world phenomenon designed to either describe or produce a certain result
a logical (computationally speaking) structure through which decisions are made
A set of instructions for a computer to retrieve data/information based on input
sequence of instructions for computational action, coded by humans so therefore neither objective nor unbiased (human bias gets baked in)
Generally - a series of steps; In modern usage - the instructions that make technological tools work (both those programmed by a human and those "learned" by machine-based neural networks)
A code written by programmer to determine output from various data sets

What is your definition of an algorithm?

The process or set of steps a computer users to calculate data or solved a problem.
a set of instructions written into programs to automate decisions
machine implementable set of rules that transform inputs into outputs
A script that automates the collection, processing, or sorting of data.
A process that automates something - there's an input (e.g. a search query or an email is sent to a ticketing system) and then there's some process that happens - a series of defined steps based on what was put in - and then an output or result is given.
A set of rules that govern a repeated calculation, usually related to computer code but doesn't technically have to be.
Computer code that describes how to process data
A series of instructions for making "decisions" with data, usually executed by a computer (scare quotes because computers don't make decisions, but to me an algorithm has a set of If/thens)
A predefined set of steps or procedures, used to accomplish a task
A computational procedure for solving a problem systematically
an ordered set of rules or instructions for figuring or solving problems, calculations, etc.
It is the code/function/computation that (in info literacy) is important as it "decides" what results are returned in a search, and how they are ordered.
A tool used in computational methods to perform a specific task, such as search the internet and return ranked results. I think it can have (or perhaps always has?) some AI component(s) that allow it to learn and modify how it works.
a sequence of steps or rules to computationally solve a problem or predict an outcome
automated data collection and sorting based on specific parameters
automated method for delivering results
a set of rules used by a computer to find data
code that is created to make mathematical connections between data points
A series of steps that translates a process for machine reading. May be used to automate processes by identifying repetitive tasks.
A formula by which to process information or queries based on multiple parameters.
a mathematical or code based instruction system from which various technology systems operate from?
A set of conditions that guide computational decision-making for situations, such as searches

Q2 - Where do you see algorithms in your life?

Where do you see algorithms in your life?
All over governmental operations in NYC (NYPD, transportation); academic planning and employment; the usual shopping/advertising; insurance
I see algorithms in most of my online activity as I utilize Google search regularly as well as applications like Instagram, Spotify, and Facebook.
Everyone...they are on social media, music, book platforms. They are part of your daily life now.
Weather predictions, street mapping, online advertising, retirement investments (stock market pricing driven by algorithms), online search results
I see a good bit in technology: specific show suggestions, ads, posts, etc. I also see this in critical thinking to solve problems and make decisions.
Data cleaning, internet searches, ads
Ranking in databases, social media feeds, and smart home products
predictive text (in phones, in autocomplets/autocorrects), in digital tools I use for analyzing text/numbers, in social media feeds, in any app I use that predicts what I might like, in ads that show up in my said feeds, in my browser (when I'm signed in)
Everywhere, online and offline
Largely in Internet results in terms of effect
EVERYWHERE. Google / DuckDuckGo data ranking, health care, Instagram and other social media,
in my own habits & decision-making, search engines, advertising targeted at me, traffic signals, hold queues, math, etc
search engines most obviously, but I know that they are invisibly involved in decisions made by large entities like government agencies or corporations
everywhere. internat ads, tv ads, tv shows (decision making), internet content (what gets most clicks), self driving cars, autopilot on planes, pretty much everything.
everywhere! They are at play in our catalog software, in cataloging itself, in social media (notoriously)
Search engines; apps; computers; library discovery systems
everywhere - social media feeds that determine the content we see or don't see, search engines, online shopping, online entertainment
Everywhere
Social media, search engine results, sponsored web content
every time I do a computer based search on the internet or in a library system; using apps that make suggestions like Spotify, Yelp, Facebook, Amazon; in the legal system for police to narrow down suspects and charges to processecuted
social media feed, search engines, credit score, working at a university that cares a lot about U.S. News & World Report rankings

Where do you see algorithms in your life?

Social media deciding which posts to show me and in what order. For a non-computer example: Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) that the lay public and medical professionals learn. "Do chest compressions at x times per minute for y minutes. Check for breath. If breath than z, if no-breath than zz, etc."

In search results that are sorted by relevance, and likely in the sorts of ads I receive based on my past purchases.

search engines, decisions i make in my personal and professional life, etc... everywhere!

Literally everywhere! Internet search, banking apps, even cooking from a recipe is technically an algorithm of sorts.

Search results ranking, Amazon shopping recommendations

everywhere? at this point almost any machine of any kind that I interact with is either using an algorithm or gathering data that feeds an algorithm

Every Google search, every web page with advertising; operating in my iPhone to predict what apps I might use based on my location (and other things); in my automated lighting system, which is set to come on at sunset... managing the traffic light next to my apartment. I could go on. But those are all electronic. I used an algorithm to cook supper (these are also known as recipes!)

EVERYWHERE. Mapping algorithms, search engines, hiring filters, pretty much everything involving a device or computation.

Web searching, junk mail, insurance premiums

social media, internet searching, database searching

Um, everywhere?!? :)

The first example I can think of is Google search, which I've always heard uses proprietary algorithms to perform searches and return ranked results. I think algorithms are also being used in facial recognition software, and some scholars have argued that the algorithms' creators' biases are being built in to the systems (likely unintentionally). See the work of Joy Adowaa Buolamwini.

Everywhere! My laptop, phone, keycard access at work, stoplights, checkout at the grocery store, driving directions, etc...!

Social media, internet advertisements, human resources, digital scholarship

Google, advertising

Google and library databases use algorithms to bring back results when I type in a search

Google, YouTube, Facebook, other social media and search engines, etc.

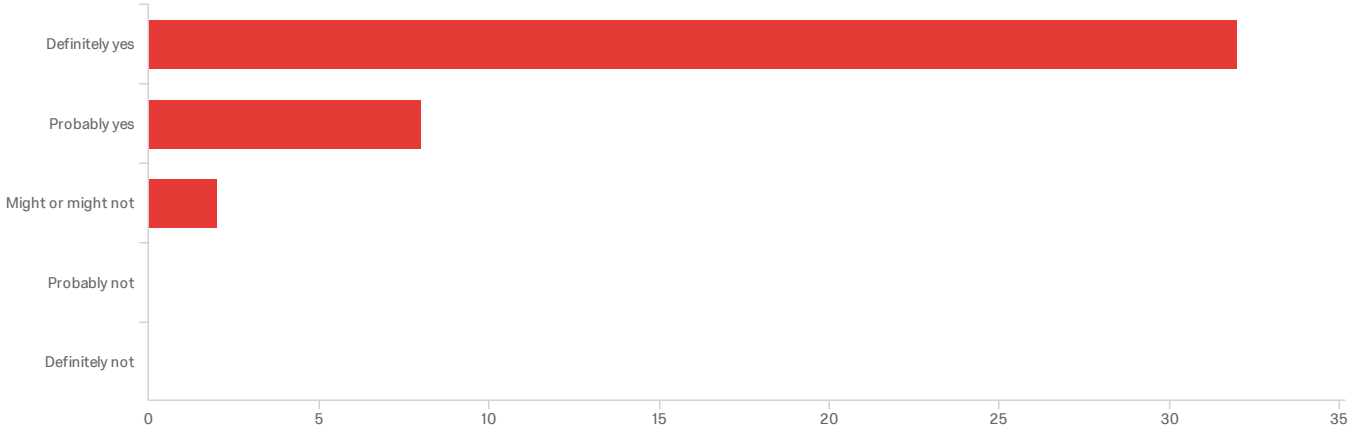
Search engines, streaming platforms, online shopping venues

Ex: Search algorithms in databases and Google.

Everywhere! Search engines, the timing of traffic lights, if there's tech there's an algorithm involved (I think? I've never really had to define any of this and am now super unsure!)

Everywhere! Searches, social media, apps, anything "personalized" to me

Q4 - Do you have any interest in learning more about algorithms?

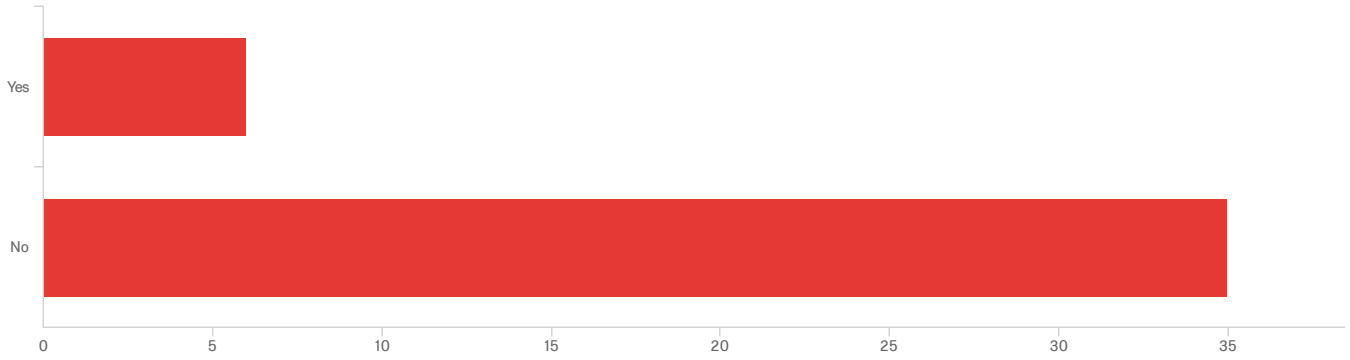


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have any interest in learning more about algorithms?	4.00	6.00	4.29	0.55	0.30	42

#	Field		Choice Count
1	Definitely yes	76.19%	32
2	Probably yes	19.05%	8
3	Might or might not	4.76%	2
4	Probably not	0.00%	0
5	Definitely not	0.00%	0
			42

Showing rows 1 - 6 of 6

Q6 - Does your library provide instructions for the digital literacy of algorithms? If yes, please describe it briefly



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Does your library provide instructions for the digital literacy of algorithms? If yes, please describe it briefly - Selected Choice	1.00	2.00	1.85	0.35	0.12	41

#	Field		Choice Count
1	Yes	14.63%	6
2	No	85.37%	35
			41

Showing rows 1 - 3 of 3

Q6_1_TEXT - Yes

Yes
The librarians offer explanations for how the "general search" function is limited, and how to adjust your criteria to carefully find 'credible' sources vs. the top hits.
Only in the context of searching databases (e.g. Google, Google Scholar, library databases)
A tiny bit. I am co-teaching a class where we address the topic. We've also had some staff development programs on the topic.
Elective workshops
A librarian I work with won funding for a 3 year project on algorithms so we will be incorporating more; I teach now that Google is an advertising algorithm not an informational one.

Yes

We talk about it very broadly in IL sessions, mainly information bubbles/customization of everything. I've been using Monster Match in intro classes for fun.

Q6_2_TEXT - No

No

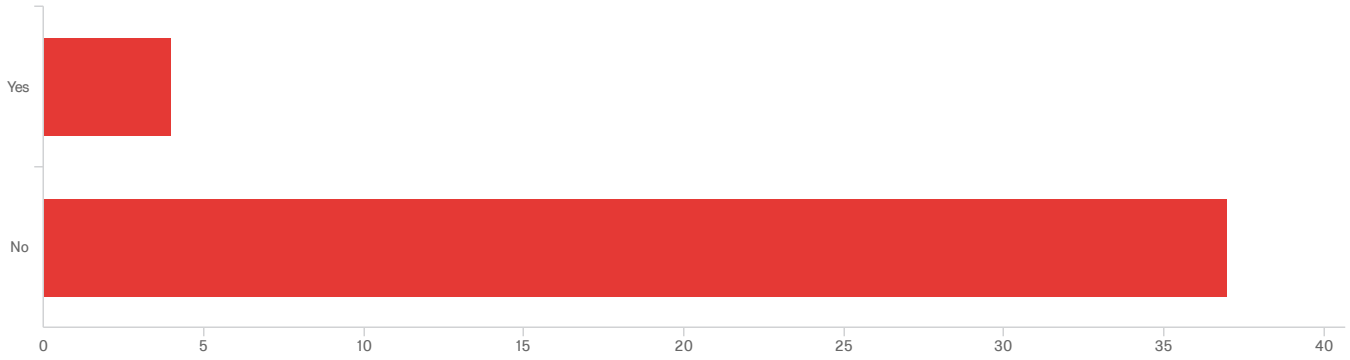
working on it

though I ocassionally fold into my digital humanities instruction

Some librarians may talk about it, but we don't offer any algorithm specific instruction that I'm aware of.

Not that I am aware of.

Q7 - Does your library provide assistance with the study of algorithms?If yes, please describe it briefly



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Does your library provide assistance with the study of algorithms? If yes, please describe it briefly - Selected Choice	1.00	2.00	1.90	0.30	0.09	41

#	Field		Choice Count
1	Yes	9.76%	4
2	No	90.24%	37
			41

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Q7_1_TEXT - Yes

Yes
Tangentally through collaboration with other departments
We have a DataLab which focuses on data science training for researchers (students, faculty, etc.)
We will through this 3 year project.

Q7_2_TEXT - No

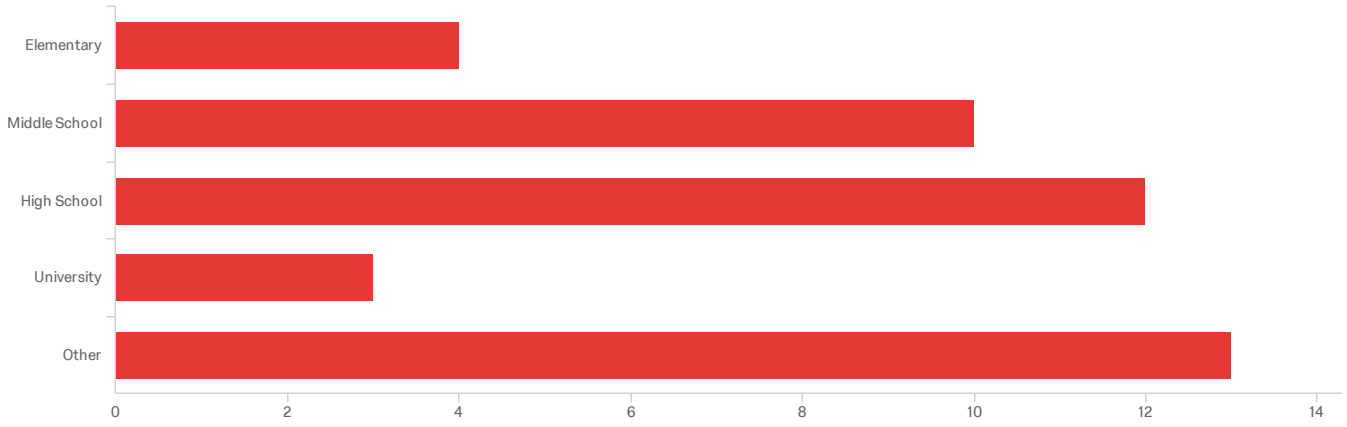
No

No

Not that I'm aware of.

not formally, anyway; it might come up in other discussions

Q3 - What do you think would be the best level to teach algorithms at?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What do you think would be the best level to teach algorithms at? - Selected Choice	1.00	5.00	3.26	1.36	1.86	42

#	Field		Choice Count
1	Elementary	9.52%	4
2	Middle School	23.81%	10
3	High School	28.57%	12
4	University	7.14%	3
5	Other	30.95%	13
			42

Showing rows 1 - 6 of 6

Q3_5_TEXT - Other

Other
both high school and higher ed/college
Scaffolding throughout, but beginning to introducing the term in high school
We do already teach algorithms in elementary -- e.g., "stacks" for addition or multiplication.

Other

all levels

Every level of academia and also in public forums (public libraries, etc.)

I don't understand the question. Thinking broadly, algorithms need to be taught across levels from elementary up.

I assume you can teach people about algorithms at all stages of their lives - so my 5 year old uses an internal algorithm to figure out what to wear once I tell him the weather... so we can talk about what an 'algorithm' is at age 5 and my father in law is always asking what an algorithm is so we takl with him about search engines... it depends on the person learning, where they're at, and what their interests are

all levels, I think if could be introduced in a simplified manner and then gain complexity

what do you mean, "teach algorithms"?

all of the above but if you are specifying a starting time, probably elementary

Depends on the intention of the program. Any level could be appropriate.

Start young and progress in complexity. Begin in elementary and continue on.

All levels! I think this is something that can be introduced at a very basic level and then built upon. Especially since technology adapts & adjusts so quickly. Google doesn't operate the same way it did last year

End of Report