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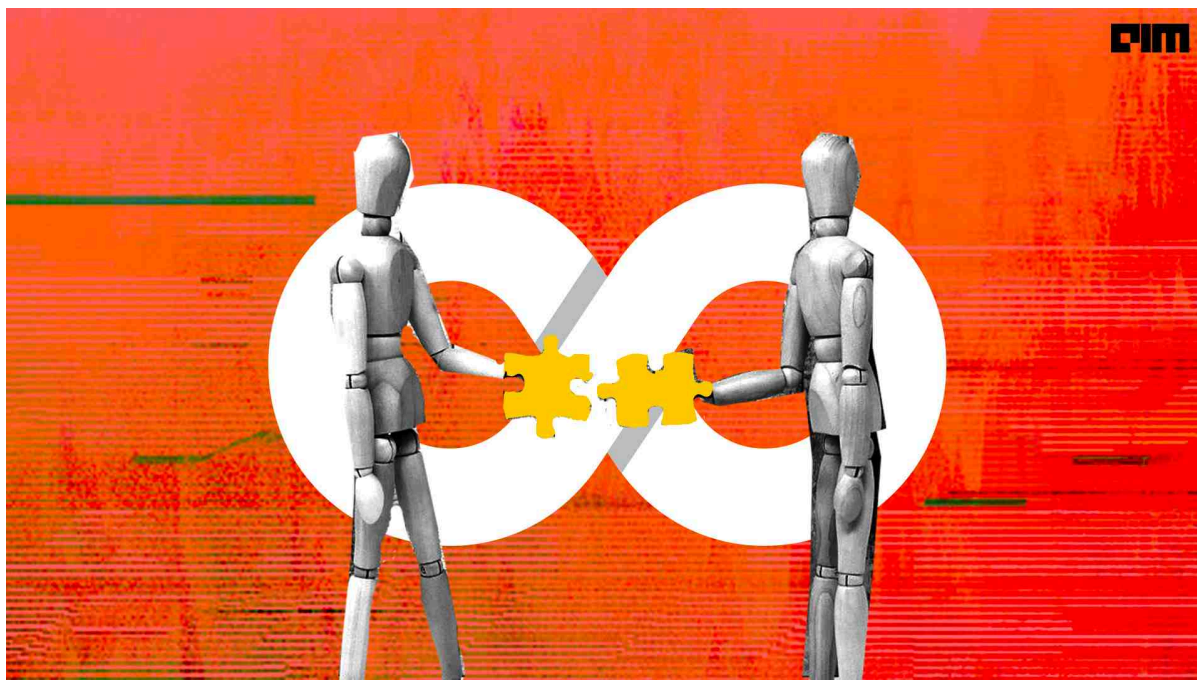
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# XOps has emerged as a popular term-what is it?

BY SREEJANI  
BHATTACHARYYA

(<https://analyticsindiamag.com/author/sreejani-bhattacharyyaanalyticsindiamag-com/>)





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XOps featured as one of the top trends in the Gartner Top 10 Data and Analytics Trends for 2021 (<https://www.gartner.com/smarterwithgartner/gartner-top-10-data-and-analytics-trends-for-2021>). The report also said that XOps plans to achieve economies of scale using DevOps best practices. XOps will also ensure reliability, reusability, and repeatability and reduce the duplication of technology and processes needed to achieve automation.

## What is XOps?

While we are talking about IT modernisation these days, one of its key elements will come from automation. While DevOps can lead us towards it, it is not enough to achieve the full results. With different Ops functions getting popular these days, XOps has emerged as the umbrella term for defining a combination of IT disciplines such as DevOps, DevSecOps, AIOps, MLOps, GitOps, and BizDevOps.

Let us understand these components that make up XOps and how they can transform IT.



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## Various components make up XOps

- DevOps – DevOps is a software development approach (<https://analyticsindiamag.com/iit-roorkee-launches-pg-certification-in-cloud-computing-and-devops/>) that allows a team to manage the application

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development pipeline from development and testing to deployment and monitoring. It aims to reduce the duration of any system's development life cycle while adhering to the requirements of the business. It is made up of various stages like continuous development, continuous integration, continuous testing, continuous deployment, and continuous monitoring.

- **BizDevOps** – BizDevOps, also known as DevOps 2.0, is an approach to software development that encourages developers, operations staff and business teams to work together so the organisation can develop software more quickly, be more responsive to user demand, and ultimately maximise revenue.
- **DataOps** (<https://analyticsindiamag.com/benefits-challenges-of-dataops-in-data-science/>) – This is a popular process in analytics that is slowly picking up at a good pace. It tries to reduce the cycle time of data analytics projects while improving the quality; it starts right from the beginning of the pipeline (data preparation) and is deployed to various points in the analytics chain and IT operations. Technology is used to automate the design and management of data delivery while adhering to appropriate levels of governance.
- **MLOps** – MLOps (<https://analyticsindiamag.com/mlops-vs-devops-a-comparative-analysis/>) refers to creating, deploying and maintaining machine learning models. It is an umbrella term that involves combining a variety of methods such as DevOps, machine learning, and handling of data that can simplify and build more efficient ways of deploying machine learning algorithms. All of this has to be done while keeping the business goals in mind.
- **GitOps** (<https://analyticsindiamag.com/why-gitops-is-becoming-important-for-developers/>) – It is the practice of managing infrastructure and application systems using Git (open-source version control system). Open-source leader Red Hat says that GitOps (<https://www.redhat.com/en/topics/devops/what-is-gitops>) uses Git pull requests to manage infrastructure provisioning and deployment automatically. The Git repository comes with the entire state of the system. This makes it easy to look at all the changes made to the system and work on them further if needed.
- **CloudOps** – CloudOps refers to managing activities involving optimising IT workloads or services in the cloud. It comes with different aspects such as cloud architecture, software development, security as well as compliance. The goal here is to improve the accessibility and efficiency of cloud services in the business.

## Efficient integration is the need of the hour

Questions might arise as to why there is a growing need for XOps. The major issue has been security—the best versions of security can be achieved only when there is a sense of collective responsibility shared across various operations teams. This has to start right from the developers building secure code and applications and

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analytics applications ensuring the security of data to IT teams building secure pipelines. Development, security, networking and cloud operations have to be integrated effectively to build secure and reliable systems for workloads.

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I am a technology journalist at AIM. What gets me excited is deep-diving into new-age technologies and analysing how they impact us for the greater good. Reach me at [sreejani.bhattacharyya@analyticsindiamag.com](mailto:sreejani.bhattacharyya@analyticsindiamag.com)

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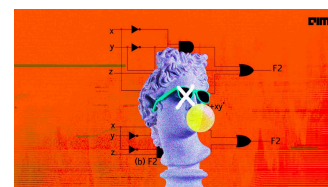
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Machine learning model with Boolean algebra starts with the data with a target variable and input or learner variables and using the set of rules it generates output value by considering a given configuration of input samples.

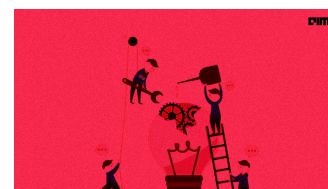
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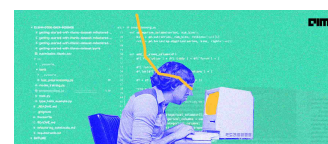
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My experience of working with different governments in solving real-life problems has been a



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#### Top platforms to assess skills of data scientists in 2022 (<https://analyticsindiamag.com/top-platforms-to-assess-skills-of-data-scientists-in-2022/>)



Several platforms have come up that include quizzes and assessments related to data science and programming concepts that can help both the recruiters and aspirants understand their skill level and ways to improve.

## Nominations open for AIM's '50 Best Firms In India For Data Scientists To Work For' index

(<https://analyticsindiamag.com/nominations-open-for-aims-50-best-firms-in-india-for-data-scientists-to-work-for-index/>)

Analytics India Magazine (AIM) has opened nominations for the third edition of its annual index on the Best Firms In India For Data Scientists To Work For. Data science companies or enterprises with data science functions can apply by filling out a survey form. The report looks into the policies and initiatives taken up by organisations to create a conducive work environment for data scientists to learn and grow professionally. All organisations are scored using a uniform evaluation criterion. The survey considers each company's strengths and benefits across five parameters: Learning & Support, Productivity & Engagement, Benefits & Well-being, Rewarding Excellence, and Diversity & Inclusion. Analytics India Magazine will publish the list of 50 best firms based on an in-depth analysis. THE BELAMY Sign up for your weekly dose of what's up in emerging technology. Email Sign up AIM is publishing the 'Best Firms For Data Scientists To Work For' index for the third consecutive year. Check last year's list [here](#). The index helps organisations understand where they stand in creating a favourable work environment for their data science professionals. The study details a company's incentives and people programs such as training and development, benefits and well being, productivity, diversity to help data scientists looking for new opportunities find an ideal match. Download our Mobile App However, the report is not an identifier of one particular metric or standard. It is defined by a set of benefits unique to a firm such as trust in the employees, rewarding good work, and creating a rapport both in and outside of work. The index covers the whole spectrum of employee retention, employee engagement, and overall employee growth. The final list is arrived at based on this survey, secondary research, and discussions with the participating enterprises. To nominate your organisation, please fill the survey form [here](#).

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## Scala vs Python for Apache Spark: Which one to go for

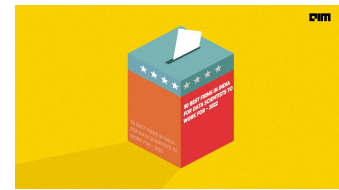
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Though Spark has APIs for both Scala and Python, let us try to understand which one you should choose for using the Apache Spark framework.

## Is data engineering the sexier job of 21st century?... than Data Scientist (<https://analyticsindiamag.com/is-data-engineering-the-sexier-job-of-21st-century-than-data-scientist/>)

"Earlier, systems crashing used to be a good sign, but it is not the case today as it can destroy companies overnight."

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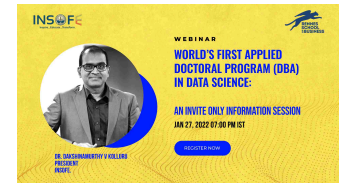
"Learn how to think like a hacker, but behave as a security expert," the course description states.



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The Rennes School of Business, France, and the International School of Engineering, India launched the world's first and only applied Doctorate of Business Administration in Data Science in 2019. To learn more about becoming a Data Science Thought Leader, attend the Zoom session scheduled at 7.00 PM on 27 January, 2022.



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It follows this with a link to dispatch a message invoking the "right to be forgotten" by the business.



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The Machine Learning Challenge focused on various attributes such as funded amount, location, loan, balance, etc., to predict if a person will be a loan defaulter or not.



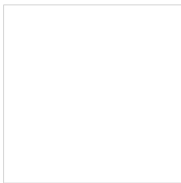
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