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# Predict Customer Churn Using a SPSS Modeler Flow

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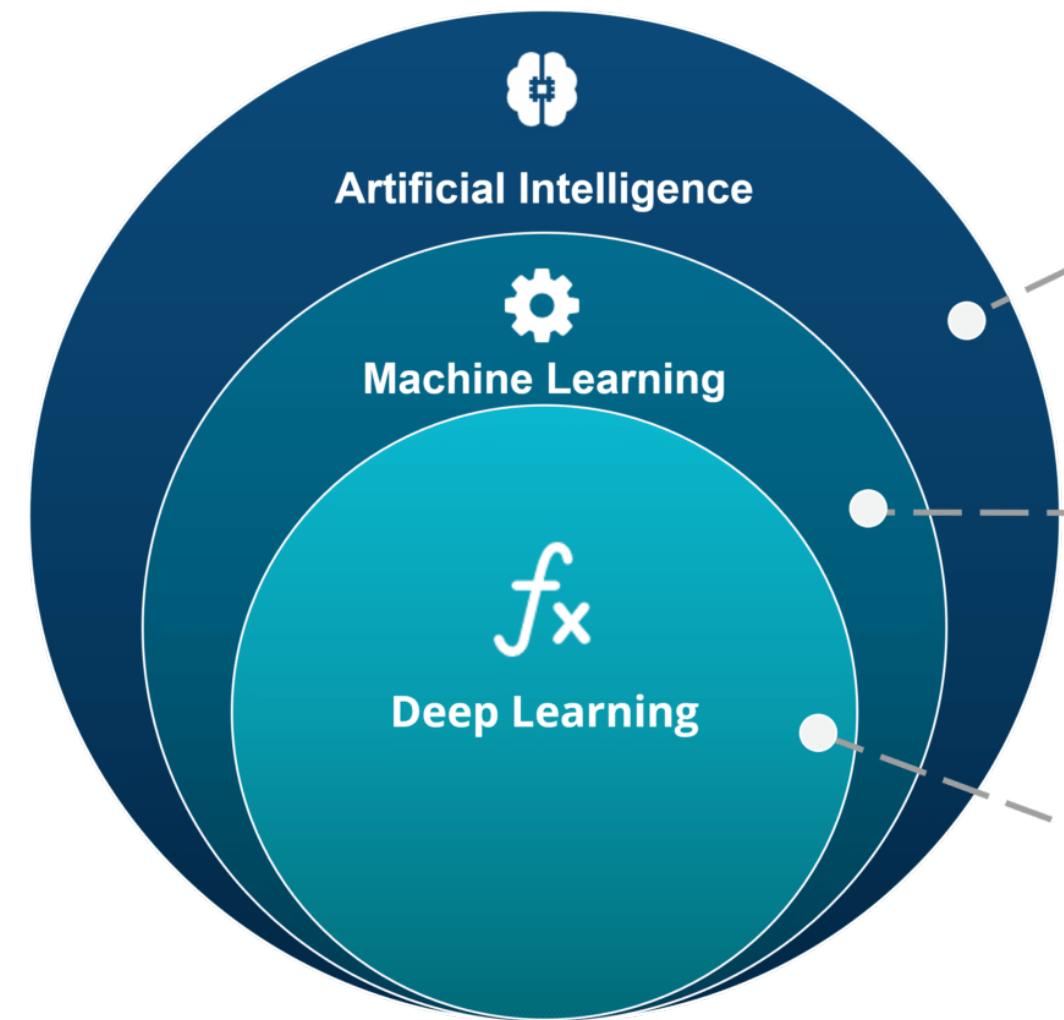
Developer Advocate, South Africa

Get Started Here: <http://ibm.biz/SPSSModelerWebinar>

# Agenda

<b>What is Machine Learning?</b>	<b>04</b>	<b>Hands-On</b>	<b>11</b>
Machine Learning Types	05		
Machine Learning Process	06	<b>Helpful Links</b>	<b>12</b>
<b>Challenges</b>	<b>07</b>	<b>Call for Code 2020</b>	<b>13</b>
<b>IBM SPSS Modeler</b>	<b>08</b>		
Why SPSS Modeler?	09		
Nodes Palette	10		

# What is Machine Learning?



## ARTIFICIAL INTELLIGENCE

A technique which enables machines to mimic human behaviour

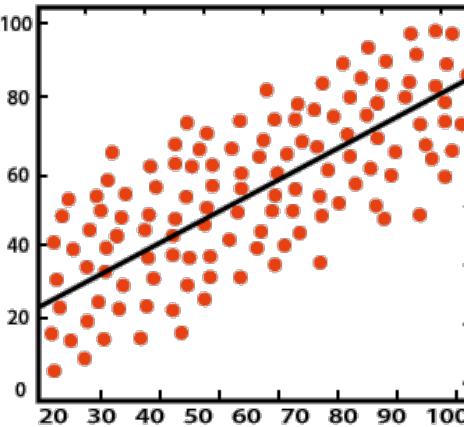
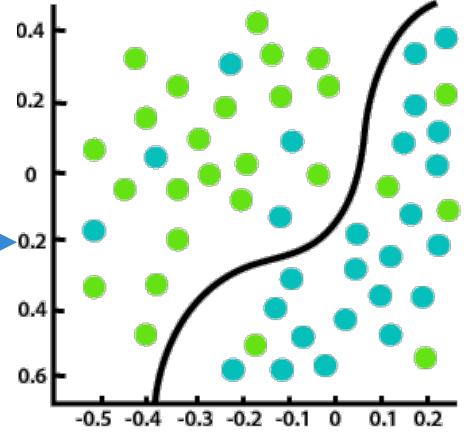
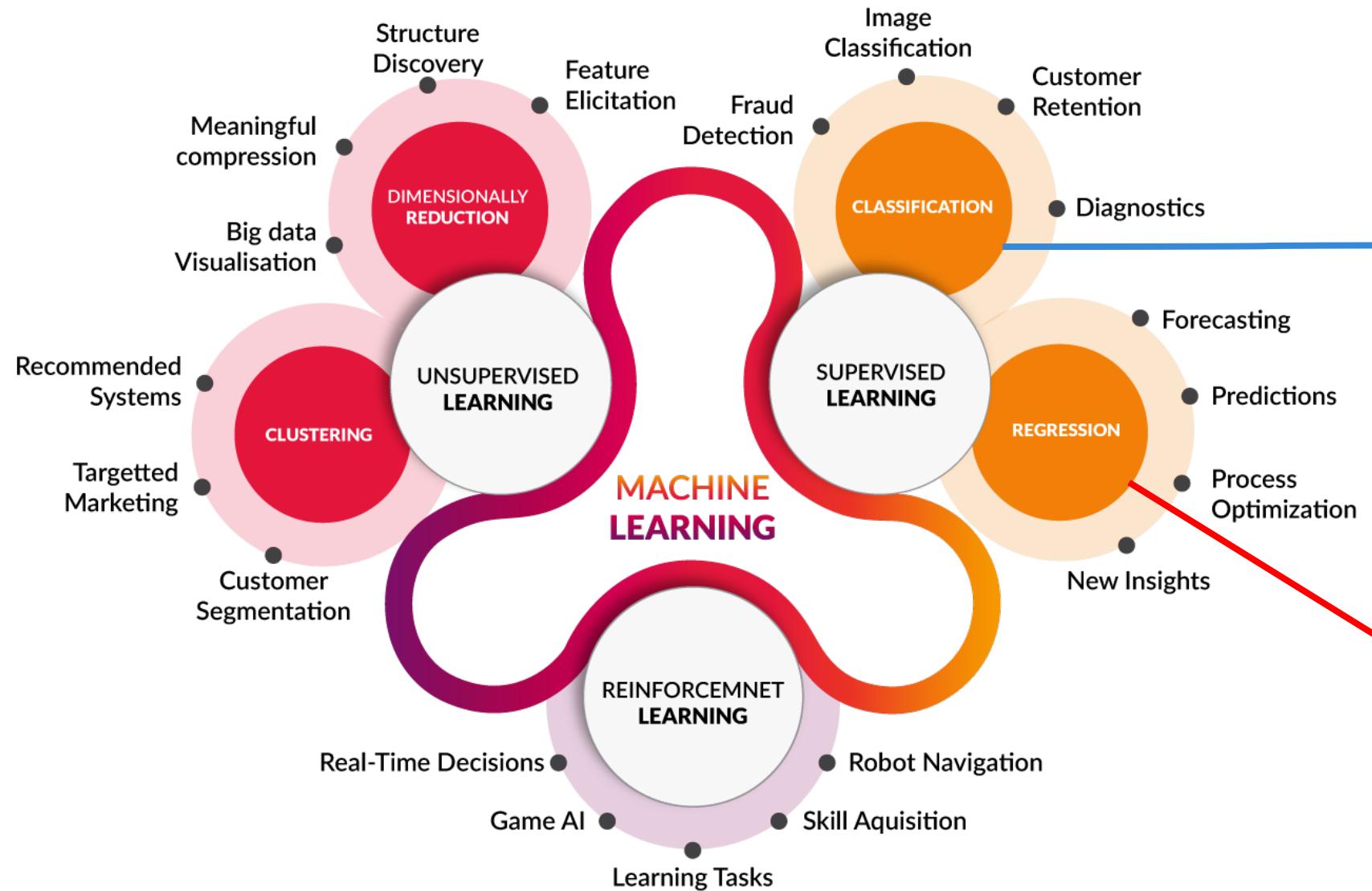
## MACHINE LEARNING

Subset of AI technique which use statistical methods to enable machines to improve with experience

## DEEP LEARNING

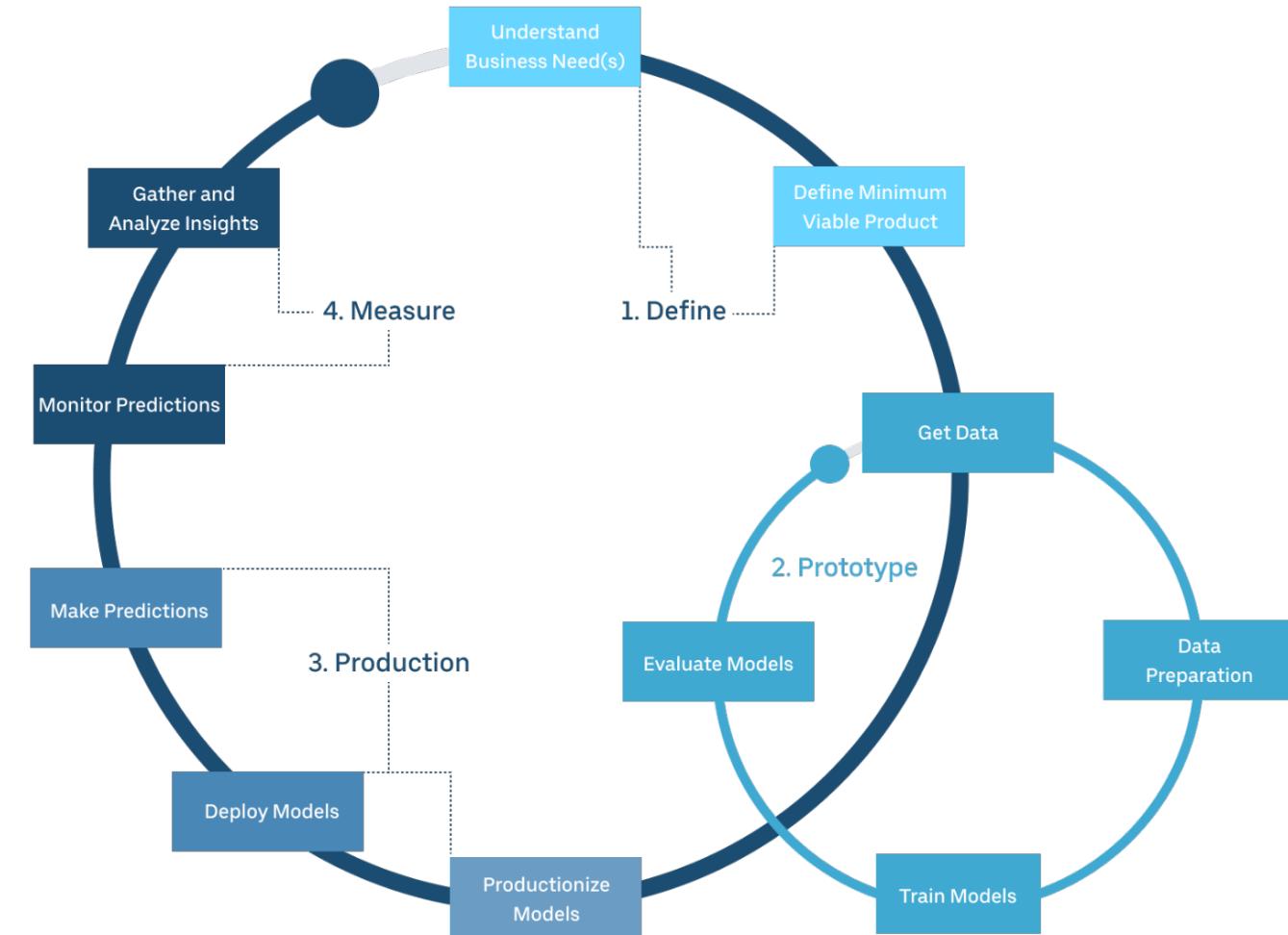
Subset of ML which make the computation of multi-layer neural network feasible

# Machine Learning Types



# ML Process

- Define the problem and solution
- Develop and prototype the model
- Produce the model
- Measure the model



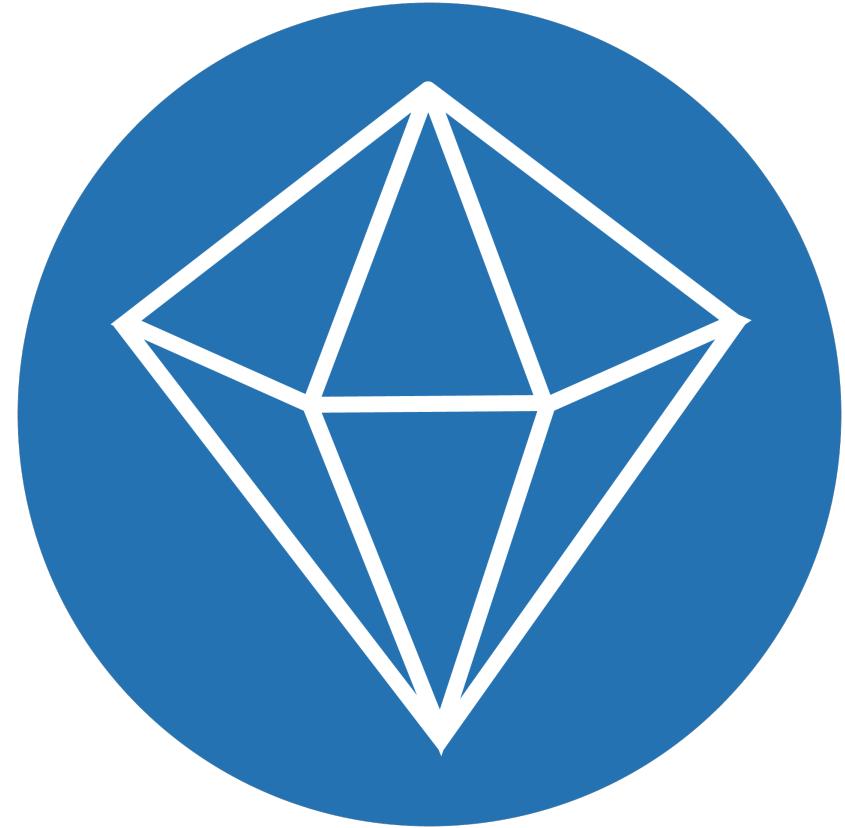
# Main Challenges These Days

- High demand for data scientists and ML engineers
- Lack of skills to meet the demand
- Traditional ML techniques are time consuming and require a lot of effort



# IBM SPSS Modeler

- SPSS Modeler ≠ SPSS Statistics
- Data Science and machine learning solution
- Data mining and text analytics software application
- Used to build predictive models



# Why SPSS Modeler?

- No programming is required
- Automates tedious tasks that are time consuming in traditional ML approaches
- Easy to use visual interface with drag and drop feature to build, evaluate, test and deploy a ML model
- Boost productivity



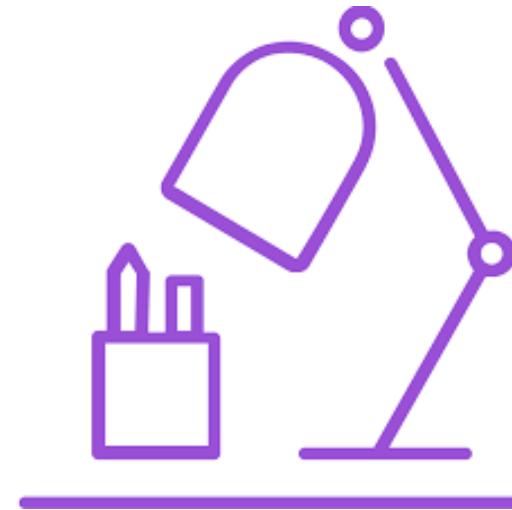
# Nodes Palette

SPSS Modeler has **8** main nodes that we can use to build our flow:

- **Import Node:** Data source (data asset, user input, simulated data)
- **Records Ops:** Perform operations on Data records (merge, aggregate,...)
- **Field Ops:** Perform operations in Data fields (filtering, manage values,... )
- **Modeling:** Define model builders (ML algorithms)
- **Text Analytics:** Perform text mining operations
- **Graph:** Perform data visualizations with chart builders
- **Output:** Model results
- **Export:** Export the results so they can be viewed in external apps

# Hands On

- Sign up/Log in to your IBM Cloud Account  
<http://ibm.biz/SPSSModelerWebinar>
- Follow along for the hands-on  
<http://ibm.biz/SPSSModelerCodeLab>



# Useful Links

Learn - develop - connect

**Get Started Here** (<https://ibm.biz/DigitalSummit>)

**Getting Started with SPSS Modeler** (<https://ibm.co/3dp3zua>)

**IBM Developer** (<https://developer.ibm.com/>)

**Data Science Community** (<http://ibm.biz/community-coursera>)

**Meetup** (<https://www.meetup.com/IBMCLOUD-Dubai/>)

# ***Build solutions that fight back.***

- Build & deploy solutions to **help seize & reduce** the impact of **COVID-19**
- Build & deploy solutions to help **halt & reverse** the impact of **Climate Change**



In 2020, Call for Code is aligned to the UN 75<sup>th</sup> anniversary global conversation theme of **climate change**, with a focus on:

- **water sustainability**
- **energy sustainability**
- **disaster resiliency**

The 2020 Call for Code Global Challenge is being expanded to address the **COVID-19 pandemic**, with a focus on:

- **crisis communication**
- **remote education**
- **community cooperation**

Join a **movement** of:

- **210,000+** problem solvers
- **165+** nations
- **8,000+** applications built

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- Open Source support from **The Linux Foundation**
- Meetings with **mentors** & potential **investors**
- Implementation support through **Code and Response™**



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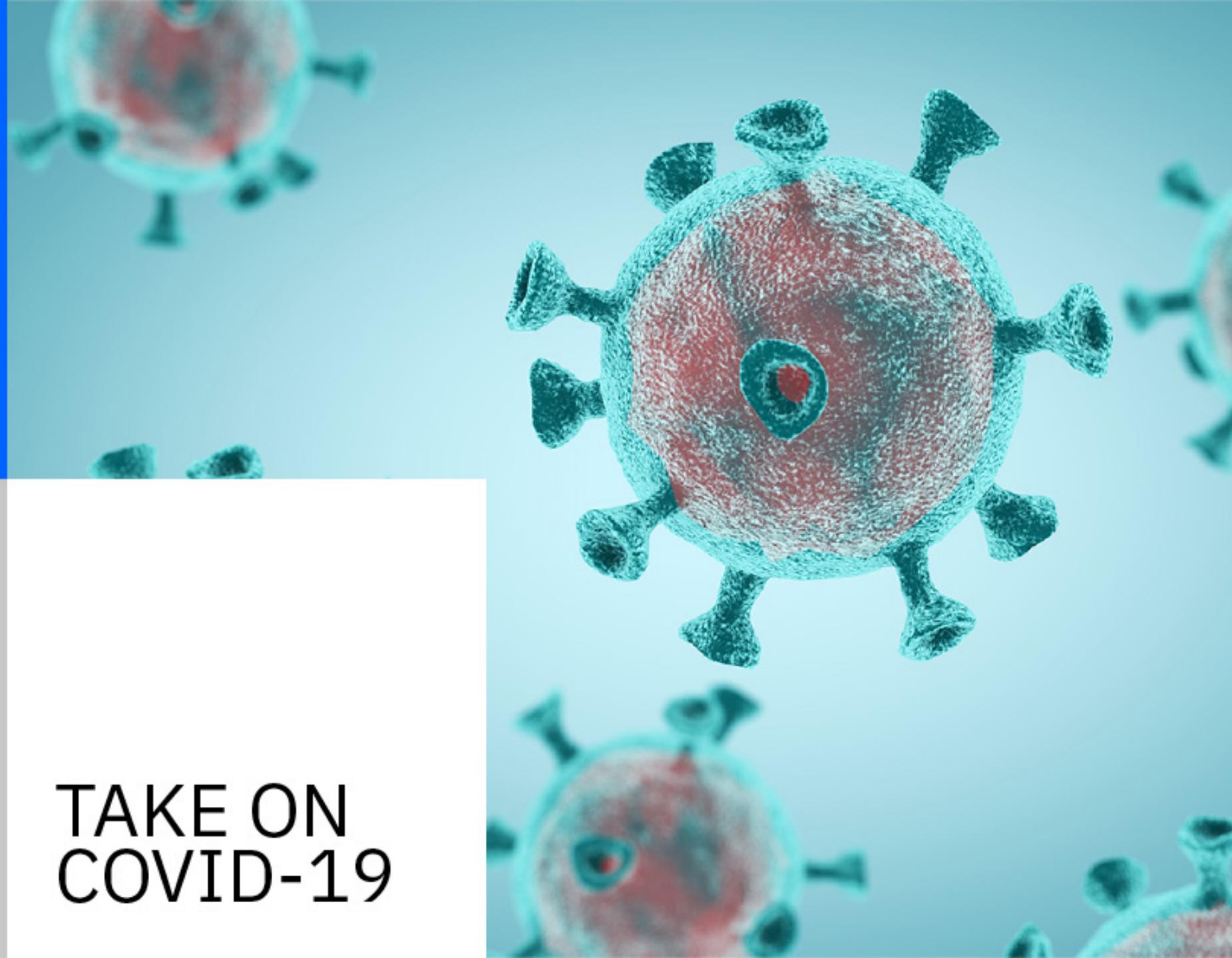
[callforcode.org](http://callforcode.org)



**IBM**

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**TAKE ON  
COVID-19**



# Thank you.

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