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ARTIFICIAL INTELLIGENCE IN MAHARASHTRA GOVERNMENT

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ABSTRACT

India's first Artificial Intelligence (AI) centre was set up by the Maharashtra Government in Mumbai. The Chief Minister of state Devendra Fadnavis launched the idea for the institute throughout the course of the the Magnetic Maharashtra Summit at the Global Economic Conference held in Canada in March 2018. The discussion held on the sidelines of NASSCOM Technology and Leadership Forum 2019, focusing how the partnership with the Swedish multinational corporation can be forged to deploy Artificial Intelligence (AI) and digitalization technologies to meet the state's needs, including using AI to take skills' development to the next level concluding that CropIn won the AI Innovation Challenge 2019, which was organised by the Maharashtra Government and NITI Aayog in association with NASSCOM.

I. INTRODUCTION

"Maharashtra has always been a forerunner in AI technology in India and will definitely support its digital economy. Good at adapting advanced technologies, Maharashtra can multiply its role as an export hub strengthening India's position in the global market," said Spiesshofer. This results in the backdrop of the state exploring the potential of AI addressing issues surrounding crop yields, citizen programs and innovation. The meeting held between Canadian Minister of International Relations, Christine St-Pierre, and state's CM was held on the topic of cooperation of AI in industrial as well as service sector. The main aim of the centre was to integrate artificial intelligence in social development's field.

Artificial Intelligence for Social Good

The Government is a leader when it comes to adopting emerging technologies for social good. Many initiatives were taken under the leadership of the Chief Minister Shri Devendra Fadnavis for adoption of Artificial Intelligence in governance in order to better the lives of the citizens through technology interventions.

- World Economic Forum to set up a Center for Fourth Industrial Revolution in Mumbai. It was launched by the Hon. Prime Minister in October 2018.
- Government and World Economic Forum are working on setting up a data aggregation platform to bring more predictability in farming by using Satellite, Drones, on-ground weather station data along with soil health cards. Data generated will be sent as advisories to farmers and AI and ML(Machine Learning) to develop a prediction model
- Signed a Statement of Intent with NITI Aayog for collaboration in areas of emerging technologies such as Artificial Intelligence, Blockchain and Internet of Things. State level pilots in Maharashtra will be replicated across the country in partnership with NITI Aayog.

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- In February 2018, the Government of Maharashtra launched Wadhwani AI, a not-for-profit Institute with a focus on solving social problems by harnessing the power of Artificial Intelligence. This Institute was inaugurated by the Hon. Prime Minister and is currently working in the areas of Agriculture and Healthcare.
- Government of Maharashtra has set up 2060 automatic weather stations in every revenue circle of the State and uses Artificial Intelligence and Machine Learning to generate farm and weather-related data, generating valuable insights for the farmers
- Recently, an International Center for Transformational Artificial in Health (ICTAI - Health) was set up by Government of Maharashtra in partnership with Niti Aayog and Wadhwani AI and support by TATA Trusts, WISH Foundation, Stanford University, IIT - Madras and PATH Foundation
- The State signed a Memorandum of Understanding with University of Southern California for collaboration in using Artificial Intelligence for Societal Benefit

In order to continue the focus on technology-based solutions in governance, Government of Maharashtra is looking to partner with startups and organizations that are passionate about solving social challenges using their Artificial Intelligence based solutions.

Artificial Intelligence Innovation Challenge

Government of Maharashtra invites enthusiastic and passionate startups and organizations from over the country, that developed AI based solutions for the social problems, to partner with the Government in areas that include, but not only limited to fields like healthcare, agriculture, education and water management.

Winning startups of this challenge will be given an opportunity to collaborate with the State's Government on conducting a Proof of Concept (POC) in Maharashtra.

That's not it. Up To 2 startups, whose ideas have the most potential to create a positive social impact, stand a chance to win a cash prize of Rs 5 lakhs each and an opportunity to partner up with the Hub at Wadhwani AI.

SPONSORS AND EVENT PARTNERS –

PARTNERS FOR SOCIAL GOOD -

- Wadhwani Institute for Artificial Intelligence

INNOVATION PARTNERS -

- Amazon Web Services
- Intel Corporation

DIGITAL ACCELARATION PARTNER -

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ELIGIBILITY

To be eligible for the Maharashtra artificial intelligence innovation challenge, a start-up or organization must fulfill the following criteria:

- The startup or organization should have developed an artificial intelligence-based solution to social problems.
- Be incorporated as a private limited company or is registered as a partnership firm or as a limited liability partnership or a sole proprietorship in India or a not for profit.
- Is in operation since at least a year.
- Is working towards the innovation of services or products which has AI as its base technology.
- Should have shown an implementation to other State Governments or with notable organisation
- Must have a "minimum viable product" and is ready to display "proof of concept". At this point Idea-stage ventures are not be considered.

THEMES

- Agriculture Processing
- Education
- Mobility and Transport
- Infrastructure
- Health Care
- Water Management
- Accessibility for Differently Abled

INNOVATION CHALLENGE GROUPS

(Following is the suggestive list of themes and indicative problem statements. Please note: start-ups that have developed AI based solutions under other relevant domains are also encouraged to apply):

Healthcare

- Supplement the shortage of personnel and lab facilities necessary for diagnosis
- Improve accessibility to early detection and diagnosis especially in areas where hospitals are not available
- provide pathology services for cancer screening and treatment which are extremely sparse outsides of major cities

Agriculture/Food processing

- Optimize and stabilize the crop yield through controlling agricultural inputs and providing early warnings on pest/disease outbreak
- Monitor crop health and provide real time action advice to farmers
- assist in increasing the share of price realization for farmers by reducing the information asymmetry between farmers and intermediaries

Education

- Supplementing learning in the classroom with smart content that will assist in interactive learning
- Predicting if certain students are about to drop-out of school and suggesting remedial actions
- helping intuitively manage the distribution of teachers across public schools based on supply-demand gaps and teacher preferences and abilities
- Providing customized teacher training based on teacher's abilities and areas for interest

Smart mobility and transport

- Assisting in travel route and flow optimization in real time
- Optimizing central railway fleet management and preventing hold-ups and accidents due to technical failures

Smart cities and infrastructure

- Monitoring potential crime incidents and general security in order to increase urban safety

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- Improving the utility of public spaces and facilities to increase livability in cities
- increasing accountability and transparency in order to monitor and optimize the delivery of public services

Water management and conservation

- Monitoring water delivery systems in order to understand real time water loss and increase efficiency
- Using intelligent meters in order to better measure and monitor water usage by homes and businesses

Accessibility for differently abled

- Assisting those with physical disabilities to use biometric scanning rather than signatures or passwords to access government services
- Increasing the accessibility of the government's online content and information to differently-abled citizens

II. CONCLUSION

Maharashtra government has been actively working towards integration of AI in the government processes of the state. The current as well as previous governments have collaborated closely with both national and international organisations to promote the usage of the modern technologies to streamline the public and private sector working. Towards this objective, AI innovation Challenge 2019 organised by the Government of Maharashtra and NITI Aayog, in association with NASSCOM. This initiative was introduced with the aim of promoting future proof AI based startups in the state. CropIn has won the AI Innovation Challenge 2019 which was organised by the Maharashtra's Government and NITI Aayog in association with NASSCOM. CropIn's 'SmartFarm' technology platform the farmland of 50 Lakh acres across almost 20 Lakh farmers. At the backend, CropIn's data lake expands this ground-truth data with satellite images of high resolutions and weather informations, these are the strong foundations of their platform 'SmartRisk'. By analysing this data for the 265 crops and nearly 3,500 variants on its platform across data points which grow every coming day,An Agri-information highway which will be built by them will also detects patterns and predict the future of the crop showing the risk and opportunity for agriculture sectors stakeholders. We hope events like this occur more often so that the state can help in promoting more advanced technologies like it did in 2019 and help the citizens to do certain this with ease.

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