

GeoSpatial AI-ML and NGAC



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GeoSpatial AI-ML

- AI and ML is rapidly emerging as game changing technology that can be used in solving many common geo-spatial problems at the state and local governments
- AI definition from Stanford Study: Artificial intelligence is that activity devoted to making machines intelligent, and intelligence is that quality that enables an entity to function appropriately and with foresight in its environment^[1]
- There is no consistent definition of “what is AI” in the context of GeoSpatial technology
- There is an opportunity for NGAC to take the initiative and define this for the community

[1] <https://ai100.stanford.edu/2016-report>

How can NGAC help?

- Without data access, innovations in AI/ML will be hampered
 - Training data is one of the most important drivers of success
 - There is need to establish data sharing mechanisms, data trusts, etc. specifically for AI/ML applications
 - What can we do to help build and maintain a vibrant innovation ecosystem?
- Developing ML models is very time consuming
 - It does not make sense for every local government to try and develop these models to solve the same common problems
 - There is need to establish ML model sharing mechanisms to help adopt this technology
- Different government agencies will have success stories, lessons learned and best practices
 - There is need to establish trusted mechanism to share and exchange these lessons, best practices, pitfalls and blind spots as identified by early adopters
 - Establish database of reference implementations that solve common local and state government problems

Shape the public policy

- The goal of AI applications must be to create value for society
- Strategies that enhance our ability to interpret AI systems and participate in their use may help build public trust in the technology
- Care must be taken to augment and enhance human capabilities and interaction, and to avoid discrimination against segments of society
- Given the current sector-specific regulation of US, new or retooled laws and policies will be needed to address the widespread impacts AI is likely to bring in geo-spatial applications
- Policies should be shaped to encourage helpful innovation, generate and transfer expertise, and foster broad corporate and civic responsibility