I am very interested to shed the light on a very important area where AI plays a very important role which is the Smart city.

First, I would like to define what is Smart City? A smart city has been defined in Wikipedia as “an urban area that uses different types of electronic Internet of things (IoT) sensors to collect data” ("Smart city," 2007) [1]. This data will be used to train computers on what we need to happen based on this collected data, therefore it will improve the operation across the city. These data will be collected from all assets which will help on better utilizing the city resources such as; water supply, transportation system, electricity, utilities, etc.

Across the world, the greatest implementation of the smart architecture is smart grids that help on saving resources, for instance in Amsterdam, “offering home energy storage units and solar panels for households that are connected to the city's smart grid. These batteries help lower stress on the grid at peak hours by allowing residents to store energy during off-peak hours. The solar panels also let residents sell spare energy from the panels back to the grid.” (Meola, 2020) [2].

In London, was announced they will begin testing on a smart parking project that would help drivers to quickly find available parking space and this will help to improve the traffic congestion.

In America, New York City has tested gunshot detection technology in the police.

“Dallas took a different approach in its steps toward becoming a smart city. Unlike the previously mentioned cities, Dallas did not apply to the Smart City Challenge. Instead, Dallas adopted smart technology with help from the private sector. On September 14, 2015, the White House Office of Science and Technology hosted an event at which Dallas launched the formation of its [Dallas Innovation Alliance (DIA)](http://www.dallasinnovationalliance.com/what-we-do/) to kick-off smart cities week. DIA is a public-private partnership composed of stakeholders from the Dallas-region who are interested in turning Dallas into a smart city. While AT&T is the predominant partner (since it selected to launch its [smart city initiative](http://about.att.com/sites/internet-of-things/smart_cities) in Dallas), other stakeholders like Microsoft, IBM, and area universities are providing input to the city’s “living lab.” This lab serves as the partnership’s testing ground for smart technology and is in Dallas’ West End.

DIA strives to use smart technology to solve urban issues such as aging infrastructure, limited resources, and increased urban density. By providing residents with greater technology and connectivity, DIA believes its living lab can offer a model for sustainable economic development that improves citizen welfare. Furthermore, DIA is rolling out its smart city initiatives in phases, which allows for efficient project management, and publishes public quarterly updates to promote accountability. Launched in March 2017, [Phase 1](http://www.dallasinnovationalliance.com/projects/) includes smart parking, smart irrigation, smart water systems, interactive digital kiosks, and an open source data platform. The city’s strong relationship with AT&T has provided a stream of resources to help Dallas become a smart city and offers a compelling model for other municipalities aiming to adopt more innovative technology.” ("Five innovative examples of smart cities in the U.S," n.d.) [3].

I think we can implement multi light systems to streets based on the density of the fog by having fog sensors that will control the bright of street lights based on the fug density. This will require some machine learning work to have everything set as programing wise that will work with sensors to control the level of the light accordingly.

We also can implement sprinkler system in all parks that will work based on humidity percentage and will be powered by solar system, so we have clean energy and eliminate wasting water as well.

Finally, there are too many examples that can use to apply AI and machine learning to our daily tasks in the way that will help using clean energy and reduce wasting resources.

Work Cited

*[1] Smart city*. (2007, August 3). Wikipedia, the free encyclopedia. Retrieved September 11, 2020, from <https://en.wikipedia.org/wiki/Smart_city>

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*[3] Five innovative examples of smart cities in the U.S*. (n.d.). Bipartisan Policy Center. <https://bipartisanpolicy.org/blog/five-innovative-examples-of-smart-cities-in-the-u-s/>