

## FoG

A Cloud is a condensation process that forms at various altitudes. It plays a significant role in a weather cycle of broader geographic zone. On the other hand, fog forms near the ground where local bodies of water, topography, and wind conditions influence its formation.

As Internet of Things became an integrated part of everyone's life, a shift is taking place from a centralized cloud computing to a localized fog computing. For example, Artificial Intelligence (AI) that navigates an autonomous vehicle requires secure and real-time computation and data processing. For such application, the fog computing is more advantageous as it pushes computation tasks toward the edge of the network, instead of routing it through a central data center.

FoG is a steel wireframe structure that houses LED lights, glass platforms, Vertical Axis Wind Turbines (VAWT), sprinklers, and planters. A module of the structure is equivalent to a spacing of existing street palm trees on site. A perimeter of the structure is equipped with LED lights, delineating a tower's silhouette at night. A network of sprinkler heads throughout the structure generates artificial fog. Nearby Los Gatos Creek becomes its water source - incorporating local ecosystem into this simulated microclimate.

FoG provides essential moisture for the plants and attract wildlife. FoG sensationalizes rays of light by filtering it through particles of mist. By taking advantage of AI technology, FoG scripts its microclimate by analyzing data from ever-changing surrounding environments such as wildlife ecology, plant's moisture content, traffic & pedestrian flow, wind velocity, and local precipitation.

The proposed VAWT harvests renewable energy for the light tower. The VAWT, in comparison with a Horizontal Axis Wind Turbine, is capable of generating energy at lower wind speed. This technology is also "bird-safe" as its blades positioned close together and rotate at constant velocities, enabling birds in-flight to spot easily.

A labyrinth of stairs links platforms in various elevations, allowing visitors to choose their own favorite trails and vistas. Two ADA compliance elevators provide accessibility to four larger platforms that considered as "floors" and the rest "stair landings". As teleworking is set to become a new norm in post COVID-19 era, FoG provides outdoor workstation and an Aqua Bar that serves mineral water around the world.

In short, FoG is an operative landscape that synchronizes algorithm & atmosphere, substance & attribute, fog & light, in an effort to elevate architecture into new realm of discoveries.