



US 20220368129A1

(19) **United States**(12) **Patent Application Publication**
Saad(10) **Pub. No.: US 2022/0368129 A1**(43) **Pub. Date: Nov. 17, 2022**(54) **SYSTEM AND METHOD OF SECURE
AUTHENTICATION AND DISCERNING
CONTROL OF A UTILITY SYSTEM***G06N 20/00* (2006.01)*G06Q 50/06* (2006.01)(52) **U.S. Cl.**CPC *H02J 3/14* (2013.01); *H04L 63/08*(2013.01); *G06K 9/6256* (2013.01); *G06N**20/00* (2019.01); *G06Q 50/06* (2013.01); *H02J**2203/10* (2020.01); *H04L 2463/082* (2013.01)(71) Applicant: **Consolidated Edison Company of
New York, Inc., New York, NY (US)**(72) Inventor: **Abdo Y. Saad, Clifton, NJ (US)**(21) Appl. No.: **17/317,345**(22) Filed: **May 11, 2021****Publication Classification**(51) **Int. Cl.***H02J 3/14* (2006.01)*H04L 29/06* (2006.01)*G06K 9/62* (2006.01)**ABSTRACT**

A system and method of operating a utility system having a plurality of equipment for controlling the operation of the utility system is provided. The method includes receiving, from a user, a control action for at least one of the plurality of equipment and determining an impact of the control action on the operation of the utility system. It is determined, based at least in part on the impact of the control action, that a predetermined condition may occur as a result of executing the control action. An authentication check is performed on the user prior to executing the control action.

