



US 20240214383A1

(19) **United States**  
(12) **Patent Application Publication** (10) **Pub. No.: US 2024/0214383 A1**  
Badawy et al. (43) **Pub. Date: Jun. 27, 2024**

(54) **SYSTEM AND METHOD FOR OUTLIER AND ANOMALY DETECTION IN IDENTITY MANAGEMENT ARTIFICIAL INTELLIGENCE SYSTEMS USING CLUSTER BASED ANALYSIS OF NETWORK IDENTITY GRAPHS**

continuation of application No. 16/691,998, filed on Nov. 22, 2019, now Pat. No. 10,681,056.

(60) Provisional application No. 62/771,889, filed on Nov. 27, 2018.

**Publication Classification**

(71) Applicant: **SailPoint Technologies, Inc.**,  
Wilmington, DE (US)

(51) **Int. Cl.**  
**H04L 9/40** (2006.01)  
**G06F 16/901** (2006.01)

(72) Inventors: **Mohamed M. Badawy**, Round Rock, TX (US); **Jostine Fei Ho**, Austin, TX (US)

(52) **U.S. Cl.**  
CPC ..... **H04L 63/102** (2013.01); **G06F 16/9024** (2019.01); **H04L 63/104** (2013.01)

(21) Appl. No.: **18/600,282**

(57) **ABSTRACT**

(22) Filed: **Mar. 8, 2024**

**Related U.S. Application Data**

(63) Continuation of application No. 17/825,545, filed on May 26, 2022, now Pat. No. 11,962,597, which is a continuation of application No. 16/861,335, filed on Apr. 29, 2020, now Pat. No. 11,388,169, which is a

Systems and methods for artificial intelligence systems for identity management systems are disclosed. Embodiments may perform outlier detection and risk assessment based on identity management data, including one or more property graphs or peer groups determined from those property graphs, to determine identity management artifacts with 'abnormal' patterns when compared to other related identity management artifacts.

