



(19) **United States**

(12) **Patent Application Publication**

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(10) **Pub. No.: US 2024/0214405 A1**

(43) **Pub. Date:**

Jun. 27, 2024

(54) **WEB PAGE RISK ANALYSIS USING MACHINE LEARNING**

(52) **U.S. Cl.**
CPC **H04L 63/1425** (2013.01); **H04L 63/1483** (2013.01)

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(21) Appl. No.: **18/602,218**

(22) Filed: **Mar. 12, 2024**

Related U.S. Application Data

(63) Continuation of application No. 17/314,697, filed on May 7, 2021, now Pat. No. 11,962,607.

Publication Classification

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

(57) **ABSTRACT**

Methods, systems, and apparatuses for risk analysis of web pages using a machine learning model are described herein. A computing device may receive a risk detection machine learning model trained to receive input corresponding to a web page and output an indication of risk associated with the web page. The computing device may execute a web browser application and collect user activity data by monitoring user activity associated with the web browser application. The computing device may access, via the web browser application, a first web page, and collect page data associated with the first web page. The computing device may calculate a risk level of the first web page. The risk level may be calculated by processing, using the risk detection machine learning model, both the user activity data and the page data. A security recommendation may be output based on the risk level.

