(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2024/0214270 A1**
VENKITASUBRAMANIAN et al. (43) **Pub. Date: Jun. 27, 2024**

(54) **PROACTIVE SCALING IN A CONTAINERIZED ENVIRONMENT USING CONVERSATION TONES AND STORIES**

(71) Applicant: **INTERNATIONAL BUSINESS MACHINES CORPORATION,** Armonk, NY (US)

(72) Inventors: **Krishnan VENKITASUBRAMANIAN,** Bengaluru (IN); **Ramakrishna ALAVALA,** Podili (IN); **Sundaragopal VENKATRAMAN,** Chennai (IN)

(57) **ABSTRACT**

A method includes: determining, by a processor set, a service availability impact and a user tone associated with a service by analyzing one or more electronic communications using natural language processing; determining, by the processor set, an impact urgency score based on the service availability impact and the user tone; determining, by the processor set, a scale-by value based on the impact urgency score; and scaling, by the processor set and based on the scale-by value, a computing cluster running a workload that provides the service. The method may include: creating a story that includes information defining the service, the impact urgency score, the scale-by value, and a date and time the scaling was performed; saving the story in a repository; identifying a pattern by analyzing plural stories saved in the repository as a time series; and proactively scaling the computing cluster running the workload based on the identified pattern.