Center for Mathematical and Applied Research

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Publications

Article

A Study on Automated Problem Troubleshooting in Cloud Environments with Rule Induction and Verification

Ashot Harutyunyan, Arnak Poghosyan, Edgar Davtyan, Karen Petrosyan, Nelson Baloian Applied Sciences (Switzerland) 2024 1047

Article

Optimizing SaaS Solutions for Enhanced Sustainability and Predictive Management of Cloud **Assets**

Ashot Harutyunyan, Arnak Poghosyan, Tigran Bunarjyan, Nelson Baloian 6th Artificial Intelligence and Cloud Computing Conference, AICCC 2024 204-210

Article

Discovery of Cloud Applications from Logs

Ashot Harutyunyan, Arnak Poghosyan, Tigran Bunarjyan, Andranik Haroyan, Marine Harutyunyan, Lilit Harutyunyan, Nelson Baloian

Future Internet 2024 216

Article

The Diagnosis-Effective Sampling of Application Traces

Ashot Harutyunyan, Arnak Poghosyan, Edgar Davtyan, Karen Petrosyan, Nelson Baloian

Applied Sciences (Switzerland) 2024 1-29

Article

Knowledge retrieval and diagnostics in cloud services with large language models

Ashot Harutyunyan, Ashot Baghdasaryan, Arnak Poghosyan, Tigran Bunarjyan, Jad El Zein

Expert Systems with Applications 2024 124736

Article

Discovery of Cloud Incidents through Streaming Consolidation of Events across Timeline and **Topology Hierarchy**

Ashot Harutyunyan, Arnak Poghosyan, Tigran Bunarjyan, Naira Grigoryan, Artur Grigoryan,

Vahan Tadevosyan, Nelson Baloian

IEEE Network Operations and Management Symposium Proceedings 2024 200764

Article

Challenges and Experiences in Designing Interpretable KPI-diagnostics for Cloud Applications Ashot Harutyunyan, Arnak Poghosyan, Lilit Harutyunyan, Nelli Aghajanyan, Tigran Bunarjyan,

A.J. Han Vinck

Journal of Universal Computer Science 2023 1298-1318

Article

Distributed Tracing for Troubleshooting of Native Cloud Applications via Rule-Induction Systems

Ashot Harutyunyan, Arnak Poghosyan, Naira Grigoryan, Clement Pang Journal of Universal Computer Science 2023 1274-1297

Conference

On diagnosing cloud applications with explainable Al

Ashot N. Harutyunyan, Nelli Aghajanyan, Lilit Harutyunyan, Arnak Poghosyan, Tigran Bunarjyan,

A.J. Han Vinck

Conference

On Al-driven customer support in cloud operations

Ashot Baghdasaryan, Tigran Bunarjyan, Arnak Poghosyan, Ashot Harutyunyan, Jad El-Zein

Conference

Root cause analysis of application performance degradations via distributed tracing Arnak Poghosyan, Ashot Harutyunyan, Naira Grigoryan, Clement Pang