

*Utilizarei esse documento como registro para meu plano de trabalho referente a minha dissertação.*

**Tema central da minha dissertação:** previsão de disponibilidade de recursos computacionais

**Pergunta principal:** "Qual é a eficácia da previsão de disponibilidade de recursos computacionais utilizando a técnica de carta de controle I-AM para melhorar o escalonamento de tarefas em sistemas distribuídos?"

## Alguma definição e discussões

Carta I-AM ()

### Amplitude móvel

A amplitude móvel é uma técnica utilizada em análise de dados para suavizar séries temporais, reduzindo a influência de flutuações aleatórias ou de curto prazo. Ela consiste em calcular a média móvel dos valores da série, em que a média é calculada em um intervalo de tempo específico que se desloca pela série.

A amplitude móvel é útil para analisar séries temporais em que há flutuações aleatórias, sazonalidade ou tendências de longo prazo, permitindo identificar padrões e fazer previsões mais precisas.

## Revisão sistemática

O preenchimento do fluxograma PRISMA 2020 para novas revisões sistemáticas envolve os seguintes passos:

1. Título: **"Uma Revisão Sistemática da Abordagem de Previsão da Disponibilidade de Recursos Computacionais usando Carta de Controle I-AM em Sistemas Distribuídos"**
2. Identificação: *Registre a identificação da revisão sistemática, como número de registro ou identificador único.*

**PPGCC - 01**

3. Fontes de informação: *Liste as bases de dados e outras fontes de informação que foram pesquisadas para identificar os estudos relevantes.*

- Scopus
- Web of Science

- IEEE Xplore
- ACM Digital Library
- SpringerLink
- ScienceDirect
- Web of Science
- Wiley

4. Estratégia de busca: Descreva a estratégia de busca utilizada, incluindo os termos de pesquisa e os critérios de inclusão e exclusão adotados.

Aqui defino uma lista de palavras-chave relevantes para o meu estudo, incluindo sinônimos e variações. Em seguida, seleciono as bases de dados que irei utilizar para fazer a pesquisa bibliográfica.

Termos de pesquisa:

- Disponibilidade de recursos computacionais
- Previsão de recursos
- Carta de controle I-AM (Individual com Amplitudes Móveis) e I-MR(Individual com Moving Range)
- Controle estatístico de processos
- Gerenciamento de recursos computacionais
- Análise de desempenho
- Sistemas distribuídos
- Computação em nuvem

Sinônimos e variações:

- Recursos de computação
- Capacidade computacional
- Controle estatístico de qualidade
- Gráfico de controle I-AM (Individual com Amplitudes Móveis)
- Gerenciamento de desempenho
- Sistema distribuído em nuvem
- Cloud computing

Bases de dados:

- Scopus
- Web of Science
- IEEE Xplore
- ACM Digital Library
- SpringerLink
- ScienceDirect
- Wiley
- Google Scholar
- ScienceDirect

#### Possíveis strings de busca:

- "Disponibilidade de recursos computacionais" AND "Carta de controle I-AM"
- "Previsão de recursos" AND "Controle estatístico de processos"
- "Gerenciamento de recursos computacionais" AND "Análise de desempenho"
- "Sistemas distribuídos" AND "Carta de controle I-AM"
- "Computação em nuvem" AND "Controle estatístico de processos"
- ("Disponibilidade de recursos computacionais" OR "Recursos de computação" OR "Capacidade computacional") AND ("Carta de controle I-AM" OR "Gráfico de controle I-AM" OR "Controle estatístico de qualidade")
- ("Previsão de recursos" OR "Gerenciamento de recursos computacionais" OR "Gerenciamento de desempenho") AND ("Controle estatístico de processos" OR "Carta de controle I-AM" OR "Gráfico de controle I-AM")
- ("Análise de desempenho" OR "Sistemas distribuídos" OR "Sistema distribuído em nuvem" OR "Cloud computing") AND ("Carta de controle I-AM" OR "Gráfico de controle I-AM" OR "Controle estatístico de qualidade")

#### String de busca em inglês (Todos os campos)

- "Availability of computational resources" AND "I-MR control chart"
- "Resource Forecasting" AND "Statistical Process Control"
- "Computing resource management" AND "Performance analysis"
- "Distributed Systems" AND "I-MR Control Chart"
- "Cloud Computing" AND "Statistical Process Control"
- ("Availability of Computing Resources" OR "Computing Resources" OR "Computing Capacity") AND ("I-MR Control Chart" OR "I-MR Control Chart" OR "Statistical Quality Control")
- ("Resource Forecasting" OR "Computing Resource Management" OR "Performance Management") AND ("Statistical Process Control" OR "I-MR Control Chart" OR "I-MR Control Chart")
- ("Performance analysis" OR "Distributed systems" OR "Distributed cloud system" OR "Cloud computing") AND ("I-MR control chart" OR "I-MR control chart" OR "Statistical quality control" )

5. Seleção de estudos: Apresente o número total de estudos identificados na busca inicial, quantos foram selecionados para a revisão completa e o número final de estudos incluídos na análise.
6. Coleta de dados: Explique como os dados foram extraídos dos estudos incluídos, indicando as variáveis de interesse e os métodos utilizados.
7. Avaliação do risco de viés: Descreva como o risco de viés foi avaliado nos estudos incluídos, mencionando as ferramentas utilizadas (por exemplo, Cochrane Risk of Bias Tool) e os critérios considerados.

8. Síntese dos resultados: Apresente os principais resultados da revisão sistemática, incluindo a descrição dos estudos incluídos, as medidas de efeito utilizadas e os principais achados.
9. Avaliação da certeza das evidências: Discuta a qualidade das evidências encontradas, considerando a confiabilidade e a relevância dos estudos incluídos.
10. Fluxograma: Preencha o fluxograma PRISMA propriamente dito, seguindo as etapas de identificação, seleção, elegibilidade e inclusão dos estudos.
11. Limitações: Identifique as limitações da revisão sistemática, como possíveis vieses, heterogeneidade dos estudos ou falta de dados.
12. Conclusões: Faça uma conclusão geral da revisão sistemática, destacando os principais achados e suas implicações práticas.

Certifique-se de seguir as diretrizes do PRISMA 2020 e adaptar o preenchimento do fluxograma de acordo com as especificidades da sua revisão sistemática.

## Objetivo da revisão sistemática

- Identificar as abordagens mais eficazes e inovadoras para previsão da disponibilidade de recursos computacionais em sistemas distribuídos e em nuvem;
- Avaliar a qualidade e a confiabilidade dos estudos que investigaram o uso da carta de controle I-AM para previsão da disponibilidade de recursos computacionais em sistemas distribuídos e em nuvem;
- Identificar as técnicas de controle estatístico de processos mais aplicadas em sistemas distribuídos e em nuvem;
- Investigar as práticas e desafios atuais relacionados à previsão da disponibilidade de recursos computacionais em sistemas distribuídos e em nuvem;
- Propor recomendações e diretrizes para a melhoria do gerenciamento de recursos computacionais em sistemas distribuídos e em nuvem por meio da previsão da disponibilidade de recursos com o uso da carta de controle I-AM e técnicas de controle estatístico de processos.

## Perguntas de pesquisa

- Quais são os métodos mais utilizados para previsão da disponibilidade de recursos computacionais em sistemas distribuídos e em nuvem?
- Qual é a efetividade da utilização da carta de controle I-AM como ferramenta para previsão da disponibilidade de recursos computacionais em sistemas distribuídos e em nuvem?
- Quais são as principais técnicas de controle estatístico de processos aplicadas em sistemas distribuídos e em nuvem?

- Como o gerenciamento de recursos computacionais pode ser melhorado em sistemas distribuídos e em nuvem por meio da análise de desempenho e do controle estatístico de processos?
- Quais são as tendências e desafios atuais relacionados à previsão da disponibilidade de recursos computacionais em sistemas distribuídos e em nuvem?

## Critérios de inclusão e exclusão dos trabalhos encontrados

### Critérios de inclusão:

- Tema: O trabalho deve abordar o tema de monitoramento ou previsão de recursos computacionais.
- Método: O trabalho deve utilizar a carta de controle I-MR ou alguma variação de carta de controle ou alguma ferramenta ou método de controle estatístico de processo.;
- Ano: Artigos publicados entre 2018 e 2023;
- Idioma: Artigos publicados em português ou inglês;

### Critérios de exclusão:

- Tema: Estudos que não abordem a temática central da pesquisa;
- Disponibilidade: o trabalho deve estar disponível integralmente;
- Integridade: Artigos que não estejam disponíveis integralmente;
- Duplicidade: Artigos duplicados.

Base		Após remoção dos duplicados
Scopus	787	753
Web of Science	3	3
IEEE Xplore	9	9
ACM Digital Library	18	7
SpringerLink	779	482
ScienceDirect	193	40
Wiley	47	30
<b>TOTAL</b>	<b>1836</b>	<b>1324</b>

[Diagrama PRISMA](#)

## META PARA A QUALIFICAÇÃO

- Introdução e contexto: Comece sua dissertação fornecendo uma introdução clara sobre o problema da disponibilidade de recursos computacionais e sua importância. Explique como a previsão pode ser útil nesse contexto.
- Revisão da literatura: Realize uma revisão abrangente da literatura existente sobre previsão da disponibilidade de recursos computacionais, bem como sobre o uso da Carta de Controle I-AM em outras áreas. Identifique as abordagens e métodos que foram propostos anteriormente, discutindo suas vantagens e limitações.
- Descrição da abordagem proposta: Apresente detalhadamente a sua abordagem para prever a disponibilidade de recursos computacionais usando a Carta de Controle I-AM. Explique os princípios teóricos subjacentes e forneça uma descrição clara dos passos metodológicos envolvidos.
- Metodologia e experimentos: Descreva a metodologia que você irá utilizar para avaliar e validar a eficácia da sua abordagem. Discuta os dados que serão coletados e as métricas de desempenho que serão utilizadas. Realize experimentos e análises para demonstrar a aplicabilidade e a efetividade da sua abordagem.

key	title	year	include?	razao exclusao	journal	issn	volume	issue	pages	authors	url	language	publisher	location	abstract	notes	keywords	pubmed_id	pmc_id
rayyan-488851	Decentralized kubernetes federation control plane	2020		Escop...	Proceedings - 2198-0738 12394-3	(ISSN)			354-359	Larsson, L. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	[Umea University This position pap	Export Date: 21	10.1109/UCC48	Cloud computing;Distributed algorithms;Distributed databases;Distributed systems;Federated cloud computing;Kubernetes;Computer p		
rayyan-488851	Task offloading paradigm in mobile computing-current issues, adopted approaches, and future direct	2023		Enfoq...	Journal of Netw	10840405	(ISSN)	212		Akhtari, M. Y. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Academic Press	[Department of Many enterprise	Export Date: 21	10.1016/j.procs	21 Collaborative edge computing;Computational offloading; Mobile edge computing;Multi-access edge computing;Task offloading;5G mobile		
rayyan-488851	Classification of resource management approaches in fog/edge paradigm and future research prospects	2023	included		Journal of Super	02080542	(ISSN)	78	11	Kansal, P. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Springer	[Delhi Technology The fog paradigm	Export Date: 21	10.1007/978-1-3273	Application placement;Load balancing;Resource allocation;Resource discovery;Resource utilization;Resource management in fog or d		
rayyan-488851	Machine and Deep Learning for Resource Allocation in Multi-Access Edge Computing: A Survey	2022		Enfoq...	IEEE Commun	1553877x	(ISSN)	24	4	Diglat, H. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	[Nanjing Univ. In the rapid de	Export Date: 21	10.1109/COMST	deep learning;IoT applications;machine learning;Multi-access edge computing;resource allocation;task offloading;task scheduling;compu		
rayyan-488851	Cloud mechanisms in cloudfog computing resource allocation for public blockchain networks	2019		Enfoq...	Journal of Circu	01045219	(ISSN)	30	9	Jiao, Y. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	IEEE Computer	[The School of Aa an emerging	Export Date: 21	10.1109/TPDS	2 Auction;Blockchain;Cloudfog computing;Game theory;P-Pricing;Proof of work;Social welfare;Commerce;Computational efficiency;Intern		
rayyan-488851	Cloud-Edge Computing-Based ICIOCS Framework for Industrial Automation and Artificial Intelligence: A	2023		Escop...	Journal of Circu	01281266	(ISSN)			Su, W. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	World Scientific	[College of Information Autom	Export Date: 21	10.1142/S0218	artificial intelligence;edge computing;ICIOCS;Industrial automation;Automation;Computer theory;Deep learning;Internet of things;Edge		
rayyan-488851	Edge Network Resource Synergy for Mobile Blockchain in Smart City	2020		Enfoq...	2020 Internation	978-17281319-0	(ISBN)		1272-1277	Guo, S. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	Circle Labor Blockchain has	Export Date: 21	10.1091/WCMAC	digital resource;edge computing;mining;mobile devices;resource synergy;Data mining;Economics;Mobile blockchain;Blockchain;Blockchain;Sma		
rayyan-488851	A dynamic resource allocation algorithm based on dual model in mobile blockchain network	2019			2019 IEEE 3rd	978-17281384-7	(ISBN)		1005-1010	Gao, Z. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	ETC4 Benders decomposition	Export Date: 21	10.1109/ETC4	Dynamic resource allocation;Mobile blockchain;Resource allocation;Energy resources;Internet service providers;Mobile telecommunication		
rayyan-488851	Resource management of GEO relay for real-time remote sensing	2021			2021 IEEE 13th	978-17281384-7	(ISBN)	14	5	Shen, Y. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Springer	[Key Laboratory Blockchain co	Export Date: 21	10.1007/978-1-3273	Cloud computing;Cloud fog computing;Cloud fog computing;Cloud fog computing;Cloud fog computing;Cloud fog computing;Cloud fog computing		
rayyan-488851	An Optimal Resource Provisioning Scheme Using QoS in Cloud Computing Based Upon the Dynamic Clu	2022			International Jour	21853100	(ISSN)	15	148-180	Singh, J.	<a href="https://www.scop.org">https://www.scop.org</a>	English	Intelligent Netw	Department of C The cloud comp	Export Date: 21	10.22264/2020	Dynamic resource allocation;Mobile blockchain;Resource allocation;Energy resources;Internet service providers;Mobile telecommunication		
rayyan-488851	Hierarchical Combinatorial Auction in Computing Resource Allocation for Mobile Blockchain	2020		Escop...	Wireless Comm	15308669	(ISSN)	2020		Xu, Y. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Hindawi Limited	[College of Con The mobile block	Export Date: 21	10.1155/2020/88	Economics;Resource allocation;Combinatorial auction;Computing resource;Incentive compatibility;Individual rationality;Mobile applicatio		
rayyan-488851	Robust Task Offloading in Dynamic Edge Computing	2023			IEEE Transactio	15361233	(ISSN)	22	1	Wang, H. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	[University of S Multi-access edge	Export Date: 21	10.1109/TMC	2 approximation;dynamic edge computing;primal-dual;robust;task offloading;Approximation;Approximation;Approximation;Approximation;Approximation		
rayyan-488851	Edge and computing for IoT: A survey on current research activities & future directions	2021			Computer Comm	01403664	(ISSN)	180	210-231	Laroui, M. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Elsevier B.V.	[Dijital Labes U The internet of	Export Date: 21	10.1016/j.com	Cloud computing;Edge computing;Internet of things;IoT;IoT;Digital devices;Fog computing;Network function virtualization;Quality of se		
rayyan-488851	Green IoT and edge as key technological enablers for a sustainable digital transition towards a smart cit	2021			Sensors	14248220	(ISSN)	21	17	Fraga-Lamas, P.	<a href="https://www.scop.org">https://www.scop.org</a>	English	MDPI AG	[Department of Internet of Th	Export Date: 21	10.3390/s21175	AI;Digital circular economy;Digital transition;Edge AI;Edge computing;Green IoT;IoT;Industry 5.0;Sustainability;Artificial Intelligence;De		
rayyan-488851	Three-stage Stackelberg game based edge computing resource management for mobile blockchain	2021			Peer-to-Peer Ne	10368642	(ISSN)	14	3	Fan, Y. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Springer	[Key Laboratory Blockchain co	Export Date: 21	10.1007/978-1-3273	Edge computing;Mobile blockchain mining;Resource management;Game theory;Blockchain;Cloud;Miner;Natural resources;Resource management		
rayyan-488851	Self-learning and self-adaptive resource allocation for cloud-based service functions	2019			Concurrency an	15320626	(ISSN)	31	23	Chen, X. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	John Wiley and	[College of Mail In the presence	Export Date: 21	10.1002/ace	44 cloud computing;resource allocation;software adaptation;Cloud computing;Decision making;Engineers;Game algorithms;Adaptive reso		
rayyan-488851	Double Auction-Based Two-Level Resource Allocation Mechanism for Computation Offloading in Mobile B	2021			Mobile Informa	15740117	(ISSN)	2021		Li, L. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Hindawi Limited	State Key Labor It is increasingly	Export Date: 21	10.1155/2021/88	Blockchain;Mobile telecommunication systems;Resource allocation;Cloud computing;Storage as a service (StaaS);Allocation mechanism;Combinator		
rayyan-488851	PF-BT: A Privacy-Aware Fog-enhanced Blockchain-assisted task scheduling	2019			Information Pro	03064573	(ISSN)	58	1	Baniata, H. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Elsevier Ltd	[University of Si In recent years,	Export Date: 21	10.1016/j.pro	20 Antology Optimization;Blockchain;Cloud computing;Fog computing;Internet of Things;Task scheduling;Ant colony optimization;Automat		
rayyan-488851	Fog Computing: A Comprehensive Architectural Survey	2020			IEEE Access	21693536	(ISSN)	8	69105-69133	Habibi, P. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	[Department of Fog computing	Export Date: 21	10.1109/ACCESS	advanced internet architecture;Cloud computing;edge computing;fog computing;Internet of things (IoT);Application programs;Computer		
rayyan-488851	Machine learning and prediction-based resource management in IoT considering DoS	2019			International Jour	22773878	(ISSN)	8	2	Braddaghatti, R.	<a href="https://www.scop.org">https://www.scop.org</a>	English	Blue Eyes Intell	[Computer Sci Internet of Th	Export Date: 21	10.35501/ijet	8 Internet of Things (IoT);Machine learning (ML);Multi-layer neural network (NN);Quality of service (QoS)		
rayyan-488851	Aerial experimentation and research platform for mobile communications and computing	2019			2019 IEEE Glob	978-17281090-2	(ISBN)			Margovic, V. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	[Department of The Third Gen	Export Date: 21	10.1109/GLOBC	5G Open research platform;5G network architecture;UAS-5G mobile communication systems;Antennas;Network architecture;Radio access		
rayyan-488851	Graph-Based Computing Resource Allocation for Mobile Blockchain	2019			Proceedings - 2198-1536 87330-0	(ISBN)			Abdelmalik, K. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	Electronics, Mohan	Since it first app	Export Date: 21	10.1091/WINCO	Blockchain;Internet of things;mobile blockchain;resources allocation;Computation theory;Graph theory;Graphic methods;Internet of th		
rayyan-488851	Optimal pricing-based edge computing resource management in mobile blockchain	2018			IEEE Internatio	15503007	(ISSN)	2018		Xiong, Z. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	[School of Com As the core issue	Export Date: 21	10.1109/ICCT	4 Edge computing;Game theory;Mining;Mobile blockchain;Resource management;Variational Inequality;Blockchain;Blockchain;Blockchain;Blockchain		
rayyan-488851	Social Welfare Maximization Auction in Edge Computing Resource Allocation for Mobile Blockchain	2018			IEEE Internatio	15503007	(ISSN)	2018		Jiao, Y. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	School of Comp Blockchain, an	Export Date: 21	10.1109/ICC	21 Auction;Edge computing;Mobile blockchain;Pricing;Proof of work;Resources allocation;Blockchain;Blockchain;Blockchain;Blockchain		
rayyan-488851	Real-time process monitoring based on multivariate control chart for anomalies driven by frequency signal	2021			Processes	22197577	(ISSN)	9		Kim, C.-H. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	MDPI	[Department of Recent development	Export Date: 21	10.3390/pro918	Empirical model;edge computing;edge computing;edge computing;edge computing;edge computing;edge computing;edge computing;edge computing		
rayyan-488851	Real-time anomaly detection in data series by log-based predictive maintenance using an evolving fuzzy	2020			IEEE Internatio	15503007	(ISSN)	2020		Kandell, D. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	University of Detection of ano	Export Date: 21	10.1109/ICDE	21 Anomaly detection;Data series;Log-based predictive maintenance;Real-time anomaly detection;Real-time anomaly detection;Real-time anomaly detection		
rayyan-488851	KPIs-Based Clustering and Visualization of HPC Jobs: A Feature Reduction Approach	2021			IEEE Access	21693536	(ISSN)	9	25522-25543	Jaewon, M. S. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	[Business Inform High-performance	Export Date: 21	10.1109/ACCESS	Clustering;feature extraction;high-performance computing;time series analysis;Benchmarking;Data visualization;Information management		
rayyan-488851	Prediction of Process Quality Performance Using Statistical Analysis and Long Short-Term Memory	2022			Applied Science	20763471	(ISSN)	12	2	Pheng, T. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	MDPI	[Techo Startup In the manufactu	Export Date: 21	10.3390/ap120	Long short-term memory;Process capability index;Process quality performance;Smart manufacturing;Statistical process analysis;Memory		
rayyan-488851	Big Data? Statistical Process Control Can Help!	2020			American Statist	00031305	(ISSN)	74	4	Qiu, P.	<a href="https://www.scop.org">https://www.scop.org</a>	English	American Statist	Department of B "Big data" is a	Export Date: 21	10.1080/000313	Covariates;Data-rich applications;Dynamic processes;Feature extraction;Image data;Spatio-temporal data		
rayyan-488851	An Advanced Brodyen-Fletcher-Goldfarb-Shanno Algorithm for Prediction and Output-Related Fault Moni	2022			Water (Switzerl	20734441	(ISSN)	13	18	Frietas, L. G. A.	<a href="https://www.scop.org">https://www.scop.org</a>	English	Hindawi Limited	[College of Sci In the process	Export Date: 21	10.1155/2022/76	Algorithms		
rayyan-488851	Research on Control Chart for Monitoring Water Consumption: A Case study on the replacement of	2021			Proceedings - 2198-1536 87330-0	(ISBN)			1098-1102	Hand, J. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	[Engineering Sci Statistical process	Export Date: 21	10.3390/procs	21 Statistical process control;Biomedical engineering;Control charts;Flowchart;Graphic methods;Efficiency gain;In-t		
rayyan-488851	Edge-Computing and Machine-Learning-Based Framework for Software Sensor Development	2019			Sensors	14248220	(ISSN)	22	11	Hanzelak, P. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	MDPI	[Enterprise Data The present res	Export Date: 21	10.3390/s2114	Industry 4.0 a Lab;IoT;Model lifecycle management;maintenance quality assurance architecture;Artificial Intelligence;Cloud Comp		
rayyan-488851	Monitoring Runtime Metrics of Fog Manufacturing via a Qualitative and Quantitative (QQ) Control Chart	2022			ACM Transactio	25776207	(ISSN)	3	2	Li, Y. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Association for	[Department of Fog manufactur	Export Date: 21	10.1145/350126	Fog manufacturing;Phase I monitoring;Quantitative and qualitative control chart;Runtime metrics;Anomaly detection;Control charts;Data		
rayyan-488851	Adaptive anomaly detection in performance metric streams	2018			IEEE Transactio	10324537	(ISSN)	15	1	Lindumoye, O. J.	<a href="https://www.scop.org">https://www.scop.org</a>	English	Institute of Elect	Computing Sci Continuous data	Export Date: 21	10.1109/TNSM	2 anomaly detection;computer network management;Performance monitoring and measurement;quality of service;time series analysis;us		
rayyan-488851	Critical embedded systems development using formal methods and statistical reliability metrics	2020			Advances in Sci	24156968	(ISSN)	4	1	Lokhtan, J. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	ASTES Publicat	Department of E Trusted systems	Export Date: 21	10.2504/ajp04	Co-Design;Hardware and Software;Safety Critical Embedded;Software Reliability;Statistical Analysis;Systems;Trusted Systems;Metronid		
rayyan-488851	Stability control in virtual machine Resource allocation for cloud computing	2019			Ap Conference	00942436	(ISSN)	2129		Israil, M.M. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Association for	[Electrical Engin Cloud computing	Export Date: 21	10.1063/1.5118	Resource Allocation		
rayyan-488851	A statistical approach to virtual server resource management	2021			Concurrency an	15320626	(ISSN)	30	4	Kandell, D. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	John Wiley and	University of Mal Resource manag	Export Date: 21	10.1002/ace	43 cloud computing;Cloud elasticity;resource management;Statistical Process Control;Clouds;Computer resource management;Controllers;Elast		
rayyan-488851	Empirical study on the discrepancy between performance testing results from virtual and physical environ	2018			Empirical Softwa	13823256	(ISSN)	3	1480-1518	Art, M.M. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Springer New	Department of C Large software s	Export Date: 21	10.1007/10664	Software performance analysis and testing on virtual environments;Software performance engineering;Open source software;Open source		
rayyan-488852	Demystifying LandTrendr and CCDC temporal segmentation	2022			Internatio Jour	15969842	(ISSN)	110		Pasquelun, V.J.	<a href="https://www.scop.org">https://www.scop.org</a>	English	Elsevier B.V.	[Department of Improved access	Export Date: 21	10.1016/j.jag	20 CCDC;Change detection;Google Earth Engine;LandTrendr;Temporal segmentation;Time series		
rayyan-488852	CEP online: A web-oriented expert system for statistical process control	2019			Software Operat	00171438	(ISSN)	39	1	Louzada, F. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Sociedade Bra	[Departamento In the paper, a	Export Date: 21	10.1590/0101	7 Capability Indices;Control charts;Instantaneous Reports		
rayyan-488852	Economic perspective on algorithm selection for predictive maintenance	2020			27th European	978-17336250-8	(ISBN)			Fabrizi, L. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Association for	[IFM Research The increasing a	Export Date: 21	2023.02.13	AI;Algorithm Selection;Economic Perspective;Prediction Error;Predictive Maintenance;Costs;Digital storage;Euros;Forecasting;Information		
rayyan-488853	The contribution of variable control charts to quality improvement in healthcare: A literature review	2021			Journal of Healt	17193201	(ISSN)	13	221-230	Vollta, E. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Elsevier Ltd	[Department of In this study, we	Export Date: 21	10.1177/174233	Biivariate rank test;healthcare;Quality improvement;Statistical process control;employee health;care organization;human;Medicine process control;review;Sc		
rayyan-488853	Control Chart Limit Width Definition for Construction Proje	2019			Journal of Qual	07330364	(ISSN)	147	9	Volk, S. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	American Stat	[Department of The design of	Export Date: 21	10.1061/ASCE	Control chart;Decision performance;Monte Carlo simulation;Risk analysis;Statistical project control;Control charts;Economic and social		
rayyan-488853	Publication performance and trends in Total Quality Management research: a bibliometric analysis	2023			Total Quality	14783363	(ISSN)	34	1	Ho, Y.-S. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Routledge	[Trend Researc Publications on	Export Date: 21	10.1080/147833	biometric analysis;research trends;Total Quality Management;TQM;Bibliometrics		
rayyan-488853	Log4Perf: suggesting and updating logging locations for web-based systems' performance monitoring	2020			Empirical Softwa	13823256	(ISSN)	25	1	Yao, K. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Springer	[Department of Performance as	Export Date: 21	10.1007/10664	Logging suggestion;Performance engineering;Performance monitoring;Software performance monitoring;Software performance monitoring;Software performance monitoring		
rayyan-488853	Optimization of overall equipment effectiveness with integrated modeling of maintenance and quality	2020			Engineering Let	1168193X	(ISSN)	38	2	Farahani, A. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	International As	[Department of The Overall Equi	Export Date: 21	2023.02.13	AI;Chart;Chart control;Maintenance;Markov chains;Performance measures;Overall Equipment Effectiveness;Continuous time systems;Integer programming;Markov d		
rayyan-488853	A Bayesian approach to set the tolerance limits for a statistical project control method	2020			International Jour	012007453	(ISSN)	58	10	Chen, Z. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Taylor and Franc	[School of man In this paper, we	Export Date: 21	10.1080/002075	Bayesian approach;earned schedule;earned value management;project management;scheduling;control charts;Bayesian networks;Budget;control		
rayyan-488853	Overall equipment effectiveness: A review and development of an integrated improvement framework	2020			International Jour	17468874	(ISSN)	30	1	Chen, C. K. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Intelligence Pu	[Faculty of Engin The paper review	Export Date: 21	10.1080/002075	Benchmark;Implementation;Improvement framework;Manufacturing;ECC;Overall equipment effectiveness;Performance measures;Purt		
rayyan-488853	Multivariate control charts using earned value and earned duration management observations to monitor p	2020			Complexity and	10368352	(ISSN)	148		Everett, L.D.	<a href="https://www.scop.org">https://www.scop.org</a>	English	Elsevier Ltd	[Department of This article prop	Export Date: 21	10.1016/j.ej	2020;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart		
rayyan-488853	Exact computational methods for univariate and multivariate control charts under runs rules	2020			Computers and	10368352	(ISSN)	163		Mehmood, C. A. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Elsevier Ltd	[Department of This article prop	Export Date: 21	10.1016/j.ej	2020;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart;Control chart		
rayyan-488854	Likelihood ratio-based CUSUM charts for real-time monitoring the quality of service in a network of queues	2022			IIEE Transactio	24725579	(ISSN)			Kuang, Y. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	Taylor and Franc	[University of Si Queuing network	Export Date: 21	10.1080/247255	CUSUM charts;likelihood ratio tests;Queuing networks;Statistical process control;Control charts;Health care;Hospitals;Quality of service		
rayyan-488854	MEWMA based control charts with runs rules for monitoring multivariate simple linear regression profiles if	2022			Communications	00810918	(ISSN)			Ahmad Karavigi	<a href="https://www.scop.org">https://www.scop.org</a>	English	Taylor and Franc	Department of In this article, the	Export Date: 21	10.1080/036109	Average run length (ARL);control charts;multivariate exponentially weighted moving average (MEWMA);multivariate simple linear profil		
rayyan-488854	Klein's supplementary runs rules on X-chart to control the mean of a Weibull random variable	2022			Quality and Reli	07488017	(ISSN)	38	4	Ho, L.L. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	John Wiley and	[Department of Most of the study	Export Date: 21	10.1002/joc	304 average run length;probability control limits;simulation;Weibull distribution;Control charts;Normal distribution;Random variables;Average		
rayyan-488854	Generalized Hotelling T2 control chart based on invariance linked test techniques with runs rules	2021			Transactio	01142632	(ISSN)	45	10	2180-2195		English	SAGE Publicat	[Department of In this study, we	Export Date: 21	10.1177/14233	Biivariate rank test;healthcare;Quality improvement;Statistical process control;employee health;care organization;human;Medicine process control;review;Sc		
rayyan-488854	The effectiveness of Max-Mahd-Over to Max-Mahd in simultaneously monitoring process mean and va	2021			Quality and Reli	07488017	(ISSN)	38	2	Kruba, R. and	<a href="https://www.scop.org">https://www.scop.org</a>	English	John Wiley and	[Department of S The paper pres	Export Date: 2				

nyman-4886610 Machine learning based control chart detection for predictive maintenance	2019	11	Computers & Ind. Eng. 360-8352	137	100031	Zenisek, Jan and <a href="https://www.sciencedirect.com/science/article/pii/S0308351219304919">https://www.sciencedirect.com/science/article/pii/S0308351219304919</a> This work presents a RAYAN-INCLU <a href="https://doi.org/10.1016/j.cie.2019.100031">https://doi.org/10.1016/j.cie.2019.100031</a> Predictive maintenance: Machine learning Concept control chart detection Time series regression: Industrial spatial data
nyman-4886611 On designing an optimal SPRT control chart with estimated process parameters under guaranteed-in-control	2022	12	Computers & Ind. Eng. 360-8352	174	108096	Tsuei, J.W. and <a href="https://www.sciencedirect.com/science/article/pii/S0308351222002019">https://www.sciencedirect.com/science/article/pii/S0308351222002019</a> Being one of the 100 Average extra quadratic loss: Guaranteed-in-control performance: Markov chain: Parameter estimation: SPRT control chart: Statistical process control
nyman-4886623 An MCDM method for cloud service selection using a Markov chain and the best-worst method	2018	11	Knowledge-Based Systems 150-7051	159	120-131	Nawaz, Fakar and <a href="https://www.sciencedirect.com/science/article/pii/S095070511830311">https://www.sciencedirect.com/science/article/pii/S095070511830311</a> Due to the increase in RAYAN-INCLU <a href="https://doi.org/10.1016/j.kbs.2018.120-131">https://doi.org/10.1016/j.kbs.2018.120-131</a> Cloud service selection: MCDM methods: Best Worst Method: Markov chains
nyman-4886624 Optimal estimated process parameters sensitive group runs chart based on expected average run length	2018	10	Heliyon 2050-8440	4	10-00848	Uyu, Husay and <a href="https://www.sciencedirect.com/science/article/pii/S2405844018183162">https://www.sciencedirect.com/science/article/pii/S2405844018183162</a> The side sensitive RAYAN-INCLU <a href="https://doi.org/10.1016/j.heliyon.2018.10-00848">https://doi.org/10.1016/j.heliyon.2018.10-00848</a> Applied mathematics: Industrial