# Um mapeamento sistemático de frameworks para integrar DevSecOps no Ciclo de vida de desenvolvimento de software

#### **Marcelo Martins Pinto**

O presente trabalho visa identificar e mapear frameworks que tenham potencial para uso como base desenvolvimento de um framework para gerenciamento centralizado de aplicações e serviços, no contexto de DevOps, com análise de vulnerabilidades desde o início do processo de desenvolvimento de software.

Foi realizado com auxílio da ferramenta on-line Parsifal (<a href="https://parsif.al">https://parsif.al</a>), a qual gerou o relatório parcial com os dados levantados e a conclusão foi inserida posteriormente através do editor de texto utilizado.

## **Planning**

Esse trabalho tem como objetivo geral investigar as soluções existentes para identificação de vulnerabilidades de segurança no processo de desenvolvimento de software e, a partir deste trabalho investigativo, desenvolver uma solução capaz de auxiliar profissionais da área de TI do TRT da 21ª Região na identificação de vulnerabilidades previamente catalogadas e compartilhadas através de CVEs.

#### **PICOC**

- **Population:** Solutions for identifying vulnerabilities in the software development process
- **Intervention:** Assessment of the feasibility of using solutions to identify vulnerabilities in the software development process by public bodies of the Judiciary
- Comparison: Comparison between technical articles, theses, dissertations published at the internet and projects to identify vulnerabilities in the software development process published at the Github
- **Outcome:** List of solutions for identifying vulnerabilities in the software development process

• **Context:** Devops and the continuous integration and continuous deployment processes

#### **Research Questions**

- 1. What kind of solutions for identifying vulnerabilities in the software development process can be used by public corporations of the brazilian Judiciary?
- 2. What are the solutions available on the market for identifying vulnerabilities in the software development process?
  - 2.1. What types of vulnerabilities does it look for?
  - 2.2. Which vulnerability database does it use?
  - 2.3. How often is this database updated?
  - 2.4. What programming language is used to develop the solution?
  - 2.5. Is it a solution that has source code available?
  - 2.6. Are there any restrictions (licenses) for using the solution?
- 3. What vulnerability scanning tools can be pipelined in software development process?

### Palavras Chave e Sinônimos

Keyword	Synonyms
identifying vulnerabilities	scanning tools
secure code technica	methodologies safe code, secure code methodologies
security software development life cycle	software development life cycle
software development process	devops, devsecops
vulnerabilities tools	scanning vulnerabilities tools

## **Search String**

("identifying vulnerabilities" OR "scanning tools") AND ("security software development life cycle" OR "software development life cycle") AND ("secure code technica" OR "methodologies safe code" OR "secure code methodologies" OR "software development process" OR "devops" OR "devsecops") AND ("vulnerabilities tools" OR "scanning vulnerabilities tools")

#### Sources

- Google Scholar (https://scholar.google.com/)
- IEEE Digital Library (http://ieeexplore.ieee.org)
- Scopus (http://www.scopus.com)

arXiv (https://arxiv.org/)

#### **Selection Criteria**

#### **Inclusion Criteria:**

- Métodos, técnicas de avaliação de segurança
- Pertence ao tema indicado

#### **Exclusion Criteria:**

- Aplicações para uso em plataforma proprietária
- Documento inacessível
- Documentos muito curtos (<5 páginas)
- Fuga ao tema
- Licença paga
- Não é língua inglesa ou portuguesa
- Solução proprietária

## **Quality Assessment Checklist**

## **Questions:**

- Aborda validação de segurança de código fonte?
- O trabalho apresenta método ou modelo para adoção de DevSecOps?
- Aborda ferramentas de DevOps ou DevSecOps?
- Utiliza base de dados de vulnerabilidades pública/aberta?
- O trabalho é referenciado/usado por 5 ou mais outros autores?

#### **Answers:**

Sim; Weight: 1

• Parcialmente; Weight: 0.5

• Não; Weight: 0

## **Quality Assessment Scores**

Max Score: Calculated based on the number of questions and on the

answer of greater weight

Cutoff save

Score: 3.49

5

#### **Data Extraction Form**

- Quais os tipos de análise de vulnerabilidade utiliza?
- Nome da ferramenta?
- Qual a linguagem de programação?
- Disponibiliza acesso aberto ao código fonte?
- Qual o tipo de licença?
- Como é usada no SDLC?
- Anotação:

## **Conducting**

## **Digital Libraries Search Strings**

## **Google Scholar:**

("open source security code scanning tools" OR "code scanning" OR "vulnerability code scanning") AND ("devops" OR "devsecops") AND cve

## **IEEE Digital Library:**

("open source security code scanning tools" OR "code scanning" OR "vulnerability code scanning") AND ("devops" OR "devsecops") AND ( "framework" OR "application" OR "tool" OR "vulnerability code scanning") AND "cve"

## **Scopus:**

("devops" OR "devsecops") AND ("framework" OR "application")

#### arXiv:

"secure" and "software development life cycle"

## **Imported Studies**

• Google Scholar: 60

• IEEE Digital Library: 53

Scopus: 81arXiv: 21

#### Análise e resultados obtidos

#### 1. Conceitos relevantes:

- a. Ativo de segurança é qualquer coisa valiosa e necessária de se proteger;
- Segurança de software tem sido definido de maneira não padronizada pelas pessoas, mas muitas dessas definições giram em torno do desenho e implementação de software seguro desde o início do desenvolvimento.
- vulnerabilidade de software é uma fraqueza no sistema de segurança.
   Pode ser classificado em 2 categorias: 1) a nível de desenho e 2) a nível de implementação;
- d. Defeito é um problema latente que permanece por anos;
- e. Bug é um problema que existe no código durante o estágio de implementação;
- f. Erro de segurança de software, ou simplesmente vulnerabilidade, é uma manifestação de um erro em qualquer artefato do ciclo de vida de desenvolvimento do software que provoca uma vulnerabilidade. Pode ser classificada em: 1) erro de requerimento; 2) erro de desenho e 3) erro de codificação;
- g. Requerimentos de segurança de software são os requisitos necessários para mitigar os erros de segurança de software no ciclo de vida de desenvolvimento;
- Especificação do risco or análise de risco é o cálculo do risco existente, que pode ser levantado em todos os estágios do ciclo de vida de desenvolvimento;
- Três maiores abordagens para tratar segurança em software:
  - Penetrar e tratar: um produto é liberado para o público e qualquer vulnerabilidade encontrada é corrigida com aplicação de patches de segurança;
  - ii. Ambiente operacional seguro: é provido por meio de ferramentas externas ao software (firewall, proxy, etc);
  - iii. Engenharia de software segura é a implementação de processos bem estruturados e mecanismos desde as fases iniciais do desenvolvimento do software:

#### 2. Principais Abordagens identificadas no estudo:

- a. Adoção de DevOps e DevSecOps conforme o nível de maturidade da entidade
- b. Segregação de funções para acompanhamento dos processos (DevOps e/ou DevSecOps)
- c. Definição de framework para implementação de DevOps/DevSecOps
- d. Segurança desde as fases iniciais do SDLC (S-SDLC)
- e. Diversidade de opções para ferramentas de busca de vulnerabilidades entre ferramentas pagas e de código aberto

## 3. Seleção dos artigos

Title	Author	Journal	Year	Added by	Added at	Status
Software for Improve the Security of Kubernetes-based CI/CD Pipeline	Shevchuk, Ruslan and Karpinski, Mikolaj and Kasianchuk, Mykhailo and Yakymenko, Ihor and Melnyk, Andriy and Tykhyi, Roman	Proceedings - International Conference on Advanced Computer Information Technologies, ACIT	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Towards Practical Cybersecurity Mapping of STRIDE and CWE - A Multi-perspective Approach	Honkaranta, Anne and Leppanen, Tiina and Costin, Andrei	Conference of Open Innovation Association, FRUCT	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Securing the Software Development Life Cycle	Arildset, Anniken and Brynildsen, Celina Heimdal and Hestsveen, Sebastian and Urne, Thea		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Comparison and Evaluation on Static Application Security Testing (SAST) Tools for Java	Li, Kaixuan and Chen, Sen and Fan, Lingling and Feng, Ruitao and Liu, Han and Liu, Chengwei and Liu, Yang and Chen, Yixiang		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Software Engineering Tools For Secure Application Development	Bellamkonda, Divya		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
PRACTICAL CORE SOFTWARE SECURITY: A Reference Framework	Ransome, James F. and Misra, Anmol and Merkow, Mark S.	Practical Core Software Security: A Reference Framework	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Design and implementation of SFCI: A tool for security focused continuous integration	Lescisin, Michael and Mahmoud, Qusay H. and Cioraca, Anca	Computers	2019	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
The Never-Ending Story: On the Need for Continuous Privacy Impact Assessment	Sion, Laurens and Landuyt, Dimitri Van and Joosen, Wouter	Proceedings - 5th IEEE European Symposium on Security and Privacy Workshops, Euro S and PW 2020	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected

Increasing developer awareness of Java secure coding in the industry: An approach ising serious games	Casqueiro, Luís Afonso Maia Rosa and Gasiba, Tiago Espinha and Pinto-Albuquerque, Maria and Lechner, Ulrike	Handbook of Research on Gamification Dynamics and User Experience Design	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Improving Attention to Security in Software Design with Analytics and Cognitive Techniques	Whitmore, Jim and Tobin, William	2017 IEEE Cybersecurity Development (SecDev)	2017	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
An Empirical Study on the Use of Static Analysis Tools in Open Source Embedded Software	Shen, Mingjie and Pillai, Akul and Yuan, Brian A and Davis, James C and Machiry, Aravind	arXiv preprint arXiv:2310.00205	2023	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Vulnerability exploration and understanding services	Darabal, Kirtana		2018	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Guidelines on minimum standards for developer verification of software	Black, Paul E and Guttman, Barbara and Okun, Vadim	arXiv preprint arXiv:2107.12850	2021	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Generic SAST tool comparer	Reigada, Alexandra de Barros		2022	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Enhancing Multi-cloud Security with Policy as Code and a Cloud Native Application Protection Platform	Colotti, Manuel Enrique		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
A transformer-based GitHub Action for Vulnerability Detection	do Nascimento, Andr{\'e} Filipe Meireles		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
IoTvulCode-AI-enabled vulnerability detection in software products designed for IoT applications	Bhandari, Guru Prasad and Assres, Gebremariam and Gavric, Nikola and Shalaginov, Andrii and Gr{\o}nli, Tor-Morten		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Static Analysis	Brucker, Achim D			Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Kubernetes Near Real-Time Monitoring and Secure Network Architectures	Mu{\~n}oz, Miguel {\'A}ngel L{\'o}pez		2022	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted

Automated Software Testing Starting from Static Analysis: Current State of the Art	Wu, Yan and Su, Jingyi and Moran, David D and Near, Chris D	arXiv preprint arXiv:2301.06215	2023	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Deliver uncompromised: A strategy for supply chain security and resilience in response to the changing character of war	Nissen, Chris and Gronager, John and Metzger, Robert and Rishikof, Harvey		2018	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Requirements Analysis	van Merode, Henry		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Comparing capability of static analysis tools to detect security weaknesses in mobile applications	Oyetoyan, Tosin Daniel and Chaim, Marcos		2017	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
A Framework of DevSecOps for Software Development Teams	Sapkota, Dinesh		2023	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
A Competition Analysis of Software Assurance Tools	Grigorian, Ashot A and Jansen, Slinger and Wagenaar, Gerard		2022	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Aufstellen eines Qualit(\"a\tsmodells aus sicherheitskritischen Anforderungen realer Softwareprojekte	Huszar, Lena			Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
DevSecOps: integraci{\'o}n de la seguridad en entornos CI/CD	Padr{\'o}n Hern{\'a}ndez, Juan Jes{\'u}s		2021	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Proactive Auto-Scaling Approach of Production Applications Using an Ensemble Model	Samir, Mohamed and Wassif, Khaled T. and Makady, Soha H.	IEEE Access	2023	Marcelo Pinto	07 Feb 2024 18:02:30	Rejected
A DevSecOps-enabled Framework for Risk Management of Critical Infrastructures	Ramaj, Xhesika		2022	Marcelo Pinto	07 Feb 2024 18:02:30	Rejected
A solution on cloud and digital transformation for IT system using DevOps yundao platform	Shi, Lanying and Yao, Wensheng and Chen, Mengxia and Liang, Huan and Chen, Yong and Yang,		2022	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted

	Chengwei and Jiang, Yiquan and Tong, Jiangang and Li, Man and Chen, Chunhua and Qiao, Hongming and Yu, Kefeng					
Konveyor Move2Kube: A Framework For Automated Application Replatforming	Seshadri, Padmanabha V. and Balagopal, Harikrishnan and Nayak, Akash and Kumar, Ashok Pon and Loyola, Pablo		2022	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Cloud Reliability	Izrailevsky, Yury and Bell, Charlie	IEEE Cloud Computing	2018	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
Within-Project Defect Prediction of Infrastructure-as-Code Using Product and Process Metrics	Dalla Palma, Stefano and Di Nucci, Dario and Palomba, Fabio and Tamburri, Damian A.	IEEE Transactions on Software Engineering	2022	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
A Machine Learning Based Monitoring Framework for Side-Channel Information Leaks	Lescisin, Michael and Mahmoud, Qusay H.	IEEE Open Journal of the Computer Society	2021	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
Architecting Digital Twins	Ferko, Enxhi and Bucaioni, Alessio and Behnam, Moris	IEEE Access	2022	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
A Survey on Observability of Distributed Edge & Container-Based Microservices	Usman, Muhammad and Ferlin, Simone and Brunstrom, Anna and Taheri, Javid	IEEE Access	2022	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
Prioritization Based Taxonomy of DevOps Challenges Using Fuzzy AHP Analysis	Akbar, Muhammad Azeem and Naveed, Wishal and Mahmood, Sajjad and Alsanad, Abeer Abdulaziz and Alsanad, Ahmed and Gumaei, Abdu and Mateen, Ahmed	IEEE Access	2020	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
Applying and Researching DevOps: A Tertiary Study	Arvanitou, Elvira Maria and Ampatzoglou, Apostolos and Bibi, Stamatia and Chatzigeorgiou,	IEEE Access	2022	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated

	Alexander and Deligiannis, Ignatios					
Toward Successful DevOps: A Decision-Making Framework	Akbar, Muhammad Azeem and Rafi, Saima and Alsanad, Abeer Abdulaziz and Qadri, Syed Furqan and Alsanad, Ahmed and Alothaim, Abdulrahman	IEEE Access	2022	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
A Systematic Framework for Addressing Critical Challenges in Adopting DevOps Culture in Software Development: A PLS-SEM Perspective	Khattak, Kausar-Nasreen and Qayyum, Faiza and Naqvi, Syed Shehryar Ali and Mehmood, Asif and Kim, Jungsuk	IEEE Access	2023	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
Embracing IaC Through the DevSecOps Philosophy: Concepts, Challenges, and a Reference Framework	Alonso, Juncal and Piliszek, Radosław and Cankar, Matija	IEEE Software	2023	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
Toward the Observability of Cloud-Native Applications: The Overview of the State-of-the-Art	Kosińska, Joanna and Baliś, Bartosz and Konieczny, Marek and Malawski, Maciej and Zieliński, Sławomir	IEEE Access	2023	Marcelo Pinto	07 Feb 2024 13:06:31	Duplicated
Proactive Auto-Scaling Approach of Production Applications Using an Ensemble Model	Samir, Mohamed and Wassif, Khaled T. and Makady, Soha H.	IEEE Access	2023	Marcelo Pinto	07 Feb 2024 13:06:31	Duplicated
A Cloud-Based Framework for Machine Learning Workloads and Applications	López García, Álvaro and De Lucas, Jesús Marco and Antonacci, Marica and Zu Castell, Wolfgang and David, Mario and Hardt, Marcus and Lloret Iglesias, Lara and Moltó, Germán and Plociennik, Marcin and Tran, Viet and Alic, Andy S. and Caballer, Miguel and Plasencia, Isabel Campos and Costantini, Alessandro and Dlugolinsky,	IEEE Access	2020	Marcelo Pinto	07 Feb 2024 13:06:31	Duplicated

	Stefan and Duma, Doina Cristina and Donvito, Giacinto and Gomes, Jorge and Heredia Cacha, Ignacio and Ito, Keiichi and Kozlov, Valentin Y. and Nguyen, Giang and Orviz Fernández, Pablo and Šustr, Zděnek and Wolniewicz, Pawel					
Context-Aware Software Vulnerability Classification Using Machine Learning	Siewruk, Grzegorz and Mazurczyk, Wojciech	IEEE Access	2021	Marcelo Pinto	07 Feb 2024 13:06:31	Duplicated
SmartX Multi-Sec: A Visibility-Centric Multi-Tiered Security Framework for Multi-Site Cloud-Native Edge Clusters	Shin, Jun-Sik and Kim, Jongwon	IEEE Access	2021	Marcelo Pinto	07 Feb 2024 13:06:31	Duplicated
Toward the Observability of Cloud-Native Applications: The Overview of the State-of-the-Art	Kosińska, Joanna and Baliś, Bartosz and Konieczny, Marek and Malawski, Maciej and Zieliński, Sławomir	IEEE Access	2023	Marcelo Pinto	07 Feb 2024 18:02:30	Rejected
Self-Service Cybersecurity Monitoring as Enabler for DevSecOps	Díaz, Jessica and Pérez, Jorge E. and Lopez-Peña, Miguel A. and Mena, Gabriel A. and Yagüe, Agustín	IEEE Access	2019	Marcelo Pinto	07 Feb 2024 13:06:31	Duplicated
A Cloud-Based Framework for Machine Learning Workloads and Applications	López García, Álvaro and De Lucas, Jesús Marco and Antonacci, Marica and Zu Castell, Wolfgang and David, Mario and Hardt, Marcus and Lloret Iglesias, Lara and Moltó, Germán and Plociennik, Marcin and Tran, Viet and Alic, Andy S. and Caballer, Miguel and Plasencia, Isabel Campos and Costantini, Alessandro and Dlugolinsky,	IEEE Access	2020	Marcelo Pinto	07 Feb 2024 18:02:30	Rejected

	Stefan and Duma, Doina Cristina and Donvito, Giacinto and Gomes, Jorge and Heredia Cacha, Ignacio and Ito, Keiichi and Kozlov, Valentin Y. and Nguyen, Giang and Orviz Fernández, Pablo and Šustr, Zděnek and Wolniewicz, Pawel					
Context-Aware Software Vulnerability Classification Using Machine Learning	Siewruk, Grzegorz and Mazurczyk, Wojciech	IEEE Access	2021	Marcelo Pinto	07 Feb 2024 18:02:30	Rejected
SmartX Multi-Sec: A Visibility-Centric Multi-Tiered Security Framework for Multi-Site Cloud-Native Edge Clusters	Shin, Jun-Sik and Kim, Jongwon	IEEE Access	2021	Marcelo Pinto	07 Feb 2024 18:02:30	Rejected
Self-Service Cybersecurity Monitoring as Enabler for DevSecOps	Díaz, Jessica and Pérez, Jorge E. and Lopez-Peña, Miguel A. and Mena, Gabriel A. and Yagüe, Agustín	IEEE Access	2019	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Embracing IaC Through the DevSecOps Philosophy: Concepts, Challenges, and a Reference Framework	Alonso, Juncal and Piliszek, Radosław and Cankar, Matija	IEEE Software	2023	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
Analysis on the Use of Declarative and Pull-based Deployment Models on GitOps Using Argo CD	Ramadoni and Utami, Ema and Fatta, Hanif Al		2021	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Infrastructure as Code as a Foundational Technique for Increasing the DevOps Maturity Level: Two Case Studies	Souza, Isac Sacchi e and Franco, Daniel Pinheiro and Silva, João Pedro São Gregorio	IEEE Software	2023	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Unifying Governance, Risk and Controls Framework Using SDLC, CICD and DevOps	Ganugapati, Sai Alekhya and Prabhu, Sandeep		2023	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted

DevSecOps in Practice with VMware Tanzu: Build, run, and manage secure multi-cloud apps at scale on Kubernetes with the Tanzu portfolio	Pandit, Parth and Hardt, Robert		2023	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Design and Practice of Security Architecture via DevSecOps Technology	Chen, Tao and Suo, Haiyan		2022	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Implementing and Automating Security Scanning to a DevSecOps CI/CD Pipeline	Marandi, Manohar and Bertia, A. and Silas, Salaja		2023	Marcelo Pinto	07 Feb 2024 18:02:29	Accepted
Development of an Alignment Model for the Implementation of DevOps in SMEs: An Exploratory Study	Sanjeetha, Mohamed B. Fathima and Ali, Ghassan Ahmed and Nawaz, Samsudeen Sabraz and Almawgani, Abdulkarem H. M. and Ali, Yahya Ali Abdelrahman	IEEE Access	2023	Marcelo Pinto	07 Feb 2024 18:02:30	Duplicated
Secure Software Development: Issues and Challenges	Ping, Sam Wen and Wah, Jeffrey Cheok Jun and Jie, Lee Wenand Han, Jeremy Bong Yong and Muzafar, Saira		2023	Marcelo Pinto	06 Feb 2024 21:39:36	Accepted
(SD-WAN) threat landscape	Gordeychik, Sergey and Kolegov, Denis		2018	Marcelo Pinto	06 Feb 2024 21:39:35	Rejected
Exploring relevant artifacts of release notes: Thepractitioners' perspective	Nath, Sristy Sumana and Roy, Banani		2022	Marcelo Pinto	06 Feb 2024 21:39:35	Rejected
Deep-learning-based vulnerability detection in binaryexecutables	Schaad, Andreas and Binder, Dominik		2022	Marcelo Pinto	06 Feb 2024 21:39:35	Rejected
A novel approach to identify security controls in sourcecode	Okutan, Ahmet and Shokri, Ali and Koscinski, Viktoria andFazelinia, Mohamad and Mirakhorli, Mehdi		2023	Marcelo Pinto	06 Feb 2024 21:39:36	Rejected
Machine learning based approach to recommend {MITRE}{ATT\&CK}	Lasky, Nicholas and Hallis, Benjamin and Vanamala,		2023	Marcelo Pinto	06 Feb 2024 21:39:36	Accepted

framework for software requirements and design specifications	Mounikaand Dave, Rushit and Seliya, Jim					
{InferFix}: End-to-end program repair with {LLMs}	Jin, Matthew and Shahriar, Syed and Tufano, Michele and Shi,Xin and Lu, Shuai and Sundaresan, Neel and Svyatkovskiy,Alexey		2023	Marcelo Pinto	06 Feb 2024 21:39:36	Accepted
Mitigating risks in software development through effectiverequirements engineering	Burkin, Valentin		2023	Marcelo Pinto	06 Feb 2024 21:39:36	Accepted
Vulnerable source code detection using {SonarCloud} codeanalysis	Puspaningrum, Alifia and Hilmi, Muhammad Anis Al and{Darsih} and Mustamiin, Muhamad and Ginanjar, Maulana Ilham		2023	Marcelo Pinto	06 Feb 2024 21:39:36	Rejected
Toward Successful DevOps: A Decision-Making Framework	Akbar, Muhammad Azeem and Rafi, Saima and Alsanad, Abeer Abdulaziz and Qadri, Syed Furqan and Alsanad, Ahmed and Alothaim, Abdulrahman	IEEE Access	2022	Marcelo Pinto	07 Feb 2024 13:06:31	Rejected
A Machine Learning Based Monitoring Framework for Side-Channel Information Leaks	Lescisin, Michael and Mahmoud, Qusay H.	IEEE Open Journal of the Computer Society	2021	Marcelo Pinto	07 Feb 2024 13:06:31	Rejected
Architecting Digital Twins	Ferko, Enxhi and Bucaioni, Alessio and Behnam, Moris	IEEE Access	2022	Marcelo Pinto	07 Feb 2024 13:06:31	Rejected
Prioritization Based Taxonomy of DevOps Challenges Using Fuzzy AHP Analysis	Akbar, Muhammad Azeem and Naveed, Wishal and Mahmood, Sajjad and Alsanad, Abeer Abdulaziz and Alsanad, Ahmed and Gumaei, Abdu and Mateen, Ahmed	IEEE Access	2020	Marcelo Pinto	07 Feb 2024 13:06:31	Rejected

Comparison and Evaluation on Static Application Security Testing (SAST) Tools for Java	Li, Kaixuan and Chen, Sen and Fan, Lingling and Feng, Ruitao and Liu, Han and Liu, Chengwei and Liu, Yang and Chen, Yixiang	ESEC/FSE 2023 - Proceedings of the 31st ACM Joint Meeting European Software Engineering Conference and Symposium on the Foundations of Software Engineering	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Duplicated
Practical Core Software Security: A Reference Framework	Ransome, James F and Misra, Anmol and Merkow, Mark S	None	2022	Marcelo Pinto	06 Feb 2024 20:54:41	Duplicated
Software composition analysis for vulnerability detection: An empirical study on Java projects	Zhao, Lida and Chen, Sen and Xu, Zhengzi and Liu, Chengwei and Zhang, Lyuye and Wu, Jiahui and Sun, Jun and Liu, Yang	None	2023	Marcelo Pinto	06 Feb 2024 20:54:41	Duplicated
Challenges and solutions when adopting DevSecOps: A systematic review	Rajapakse, Roshan N and Zahedi, Mansooreh and Babar, M Ali and Shen, Haifeng	arXiv preprint arXiv:2103.08266	2021	Marcelo Pinto	06 Feb 2024 20:54:40	Duplicated
Building secure cars: assuring the automotive software development lifecycle	Oka, Dennis Kengo	None	2021	Marcelo Pinto	06 Feb 2024 20:54:41	Duplicated
Cloud Reliability	Izrailevsky, Yury and Bell, Charlie	IEEE Cloud Computing	2018	Marcelo Pinto	07 Feb 2024 13:06:31	Rejected
Within-Project Defect Prediction of Infrastructure-as-Code Using Product and Process Metrics	Dalla Palma, Stefano and Di Nucci, Dario and Palomba, Fabio and Tamburri, Damian A.	IEEE Transactions on Software Engineering	2022	Marcelo Pinto	07 Feb 2024 13:06:31	Accepted
A Survey on Observability of Distributed Edge & Container-Based Microservices	Usman, Muhammad and Ferlin, Simone and Brunstrom, Anna and Taheri, Javid	IEEE Access	2022	Marcelo Pinto	07 Feb 2024 13:06:31	Rejected
Development of an Alignment Model for the Implementation of DevOps in SMEs: An Exploratory Study	Sanjeetha, Mohamed B. Fathima and Ali, Ghassan Ahmed and Nawaz, Samsudeen Sabraz and	IEEE Access	2023	Marcelo Pinto	07 Feb 2024 13:06:31	Rejected

	Almawgani, Abdulkarem H. M. and Ali, Yahya Ali Abdelrahman					
Embracing IaC Through the DevSecOps Philosophy: Concepts, Challenges, and a Reference Framework	Alonso, Juncal and Piliszek, Radosław and Cankar, Matija	IEEE Software	2023	Marcelo Pinto	07 Feb 2024 13:06:31	Accepted
A DevSecOps-enabled Framework for Risk Management of Critical Infrastructures	Ramaj, Xhesika		2022	Marcelo Pinto	07 Feb 2024 13:06:31	Duplicated
Applying and Researching DevOps: A Tertiary Study	Arvanitou, Elvira Maria and Ampatzoglou, Apostolos and Bibi, Stamatia and Chatzigeorgiou, Alexander and Deligiannis, Ignatios	IEEE Access	2022	Marcelo Pinto	07 Feb 2024 13:06:31	Accepted
Towards Agile Cybersecurity Risk Management for Autonomous Software Engineering Teams	Salin, Hannes and Lundgren, Martin	Journal of Cybersecurity and Privacy	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Open Source Software Computed Risk Framework	Chapman, Jon and Venugopalan, Hari	International Scientific and Technical Conference on Computer Sciences and Information Technologies	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Ambush from All Sides: Understanding Security Threats in Open-Source Software CI/CD Pipelines	Pan, Ziyue and Shen, Wenbo and Wang, Xingkai and Yang, Yutian and Chang, Rui and Liu, Yao and Liu, Chengwei and Liu, Yang and Ren, Kui	IEEE Transactions on Dependable and Secure Computing	2024	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Towards automated security design flaw detection	Sion, Laurens and Tuma, Katja and Scandariato, Riccardo and Yskout, Koen and Joosen, Wouter	Proceedings - 2019 34th IEEE/ACM International Conference on Automated Software Engineering Workshops, ASEW 2019	2019	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted

The evolution of distributed systems towards microservices architecture	Salah, Tasneem and Zemerly, M. Jamal and Yeun, Chan Yeob and Al-Qutayri, Mahmoud and Al-Hammadi, Yousof	2016 11th International Conference for Internet Technology and Secured Transactions, ICITST 2016	2017	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
CD3T: Cross-project dependency defect detection tool	Yao, Yongming and Huang, Song and Feng, Cuiyi and Liu, Chen and Xu, Chenying	International Journal of Performability Engineering	2019	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Architectural tactics in software architecture: A systematic mapping study	Márquez, Gastón and Astudillo, Hernán and Kazman, Rick	Journal of Systems and Software	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
From virtualization security issues to cloud protection opportunities: An in-depth analysis of system virtualization models	Compastié, Maxime and Badonnel, Rémi and Festor, Olivier and He, Ruan	Computers and Security	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Service Function Chaining security survey: Addressing security challenges and threats	Pattaranantakul, Montida and Vorakulpipat, Chalee and Takahashi, Takeshi	Computer Networks	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
SEAF: A Scalable, Efficient, and Application-independent Framework for container security detection	Chen, Libo and Xia, Yihang and Ma, Zhenbang and Zhao, Ruijie and Wang, Yanhao and Liu, Yue and Sun, Wenqi and Xue, Zhi	Journal of Information Security and Applications	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
The PREVENT-Model: Human and Organizational Factors Fostering Engineering of Safe and Secure Robotic Systems	Glasauer, Christina	Journal of Systems and Software	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
From DevOps to DevSecOps is not enough. CyberDevOps: an extreme shifting-left architecture to bring cybersecurity within software security lifecycle pipeline	Lombardi, Federico and Fanton, Alberto	Software Quality Journal	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted

An Approach to Characterize the Security of Open-Source Functions using LSP	Pereira, José D'Abruzzo and Vieira, Marco	Proceedings - International Symposium on Software Reliability Engineering, ISSRE	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Building next generation Cyber Ranges with CRACK	Russo, Enrico and Costa, Gabriele and Armando, Alessandro	Computers and Security	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Generating Tests for the Discovery of Security Flaws in Product Variants	Araujo, Francisco and Medeiros, Iberia and Neves, Nuno	Proceedings - 2020 IEEE 13th International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2020	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Reproducible Software Vulnerability Testing with IaC	Akasaka, Kohei and Nakamura, Akihito	Proceedings - 2020 International Conference on Computational Science and Computational Intelligence, CSCI 2020	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Towards a Deep Learning Model for Vulnerability Detection on Web Application Variants	Fidalgo, Ana and Medeiros, Iberia and Antunes, Paulo and Neves, Nuno	Proceedings - 2020 IEEE 13th International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2020	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Assurance for CyberPhysical Systems: Addressing Supply Chain Challenges to Trustworthy Software-Enabled Things	Martin, Robert Alan	Systems Security Symposium, SSS 2020 - Conference Proceedings	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
A novel Security-by-Design methodology: Modeling and assessing security by SLAs with a quantitative approach	Casola, Valentina and De Benedictis, Alessandra and Rak, Massimiliano and Villano, Umberto	Journal of Systems and Software	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted

DevOps for containerized applications	Biener, Adam S. and Crawford, Andrea C.	Advances in Intelligent Systems and Computing	2019	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Efficient Software Defined Systems Using Common Core Components	Lee, Hyungro and Fox, Geoffrey C.	IEEE International Conference on Cloud Computing, CLOUD	2017	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
A model-based mode-switching framework based on security vulnerability scores	Riegler, Michael and Sametinger, Johannes and Vierhauser, Michael and Wimmer, Manuel	Journal of Systems and Software	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Secure Software Development in the Era of Fluid Multi-party Open Software and Services	Pashchenko, Ivan and Scandariato, Riccardo and Sabetta, Antonino and Massacci, Fabio	Proceedings - International Conference on Software Engineering	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
A novel autonomous container-based platform for cybersecurity training and research	Chouliaras, Nestoras and Kantzavelou, Ioanna and Maglaras, Leandros and Pantziou, Grammati and Ferrag, Mohamed Amine	PeerJ Computer Science	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
An automated closed-loop framework to enforce security policies from anomaly detection	Henriques, João and Caldeira, Filipe and Cruz, Tiago and Simões, Paulo	Computers and Security	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
DAVS: Dockerfile Analysis for Container Image Vulnerability Scanning	Doan, Thien-Phuc and Jung, Souhwan	Computers, Materials and Continua	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Containers' Privacy and Data Protection via Runtime Scanning Methods	Rojo, Francisco and Pan, Lei	Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Docker ecosystem – Vulnerability Analysis	Martin, A. and Raponi, S. and Combe, T. and Di Pietro, R.	Computer Communications	2018	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected

Cataloging GitHub repositories	Sharma, Abhishek and Thung, Ferdian and Kochhar, Pavneet Singh and Sulistya, Agus and Lo, David	ACM International Conference Proceeding Series	2017	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Integrating Security into Software Development Lifecycle: An Experience Return; [Retour d'expérience d'intégration des principes de sécurité dans un cycle de développement logiciel]	Butti, Laurent	CEUR Workshop Proceedings	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Empirical cloud security: Practical intelligence to evaluate risks and attacks	Sood, Aditya K.	Empirical Cloud Security: Practical Intelligence to Evaluate Risks and Attacks	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Topical issues related to certification tests of information security tools	Varenitca, Vitali V. and Markov, Alexey S. and Naschokin, Pavel A.	CEUR Workshop Proceedings	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Keyword Extraction From Specification Documents for Planning Security Mechanisms	Poozhithara, Jeffy Jahfar and Asuncion, Hazeline U. and Lagesse, Brent	Proceedings - International Conference on Software Engineering	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Agile methods for improved cyber operations planning	Carroll, Jami M.	European Conference on Information Warfare and Security, ECCWS	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Example-Based Vulnerability Detection and Repair in Java Code	Zhang, Ying and Xiao, Ya and Kabir, Md Mahir Asef and Yao, Danfeng and Meng, Na	IEEE International Conference on Program Comprehension	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted

Building trust in container environment	Guo, Yunlong and Yu, Aimin and Gong, Xiaoli and Zhao, Lixin and Cai, Lijun and Meng, Dan	Proceedings - 2019 18th IEEE International Conference on Trust, Security and Privacy in Computing and Communications/13th IEEE International Conference on Big Data Science and Engineering, TrustCom/BigDataSE 2019	2019	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Why don't developers detect improper input validation? '; DROP TABLE Papers; -	Braz, Larissa and Fregnan, Enrico and Calikli, Gul and Bacchelli, Alberto	Proceedings - International Conference on Software Engineering	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Effect of Coding Styles in Detection of Web Application Vulnerabilities	Medeiros, Ibéria and Neves, Nuno	Proceedings - 16th European Dependable Computing Conference, EDCC 2020	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Understanding Hackers' Work: An Empirical Study of Offensive Security Practitioners	Happe, Andreas and Cito, Jürgen	ESEC/FSE 2023 - Proceedings of the 31st ACM Joint Meeting European Software Engineering Conference and Symposium on the Foundations of Software Engineering	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Container Orchestration Honeypot: Observing Attacks in the Wild	Spahn, Noah and Hanke, Nils and Holz, Thorsten and Kruegel, Chris and Vigna, Giovanni		2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Kunerva: Automated Network Policy Discovery Framework for Containers	Lee, Seungsoo and Nam, Jaehyun	IEEE Access	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted

Open-Source Software Security Challenges and Policies for Cloud Enterprises	Gupta, Sagar and Vadlamudi, Sailaja	2023 3rd International Conference on Intelligent Communication and Computational Techniques, ICCT 2023	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Characterizing the Security of Github CI Workflows	Koishybayev, Igibek and Nahapetyan, Aleksandr and Zachariah, Raima and Muralee, Siddharth and Reaves, Bradley and Kapravelos, Alexandros and Machiry, Aravind	Proceedings of the 31st USENIX Security Symposium, Security 2022	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
An Empirical Study of OSS-Fuzz Bugs	Ding, Zhen Yu and Le Goues, Claire	Proceedings - 2021 IEEE/ACM 18th International Conference on Mining Software Repositories, MSR 2021	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
AlBugHunter: A Practical tool for predicting, classifying and repairing software vulnerabilities	Fu, Michael and Tantithamthavorn, Chakkrit and Le, Trung and Kume, Yuki and Nguyen, Van and Phung, Dinh and Grundy, John	Empirical Software Engineering	2024	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Full-stack vulnerability analysis of the cloud-native platform	Zeng, Qingyang and Kavousi, Mohammad and Luo, Yinhong and Jin, Ling and Chen, Yan	Computers and Security	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
SerialDetector: Principled and Practical Exploration of Object Injection Vulnerabilities for the Web	Shcherbakov, Mikhail and Balliu, Musard	28th Annual Network and Distributed System Security Symposium, NDSS 2021	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
MirrorTaint: Practical Non-intrusive Dynamic Taint Tracking for JVM-based Microservice Systems	Ouyang, Yicheng and Shao, Kailai and Chen, Kunqiu and Shen, Ruobing and Chen, Chao	Proceedings - International Conference on Software Engineering	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected

	and Xu, Mingze and Zhang, Yuqun and Zhang, Lingming					
Software repositories and machine learning research in cybersecurity	Vanamala, Mounika and Bryant, Keith and Caravella, Alex	2	2023	Marcelo Pinto	06 Feb 2024 21:39:36	Accepted
An introduction to adaptive software security	Nia, Mehran Alidoost	2	2023	Marcelo Pinto	06 Feb 2024 21:39:36	Accepted
Risk assessment techniques and survey method for {COTS}components	Gupta, Rashmi and Raghav, Shalini	2	2012	Marcelo Pinto	06 Feb 2024 21:39:36	Rejected
Software Development Analytics in practice: A systematic literature review	Caldeira, Joao and Abreu, Fernando Brito e and Cardoso,Jorge and Sim{\~o}es, Rachel and Oliveira, Toacy and Reis,Jos{\'e}	2		Marcelo Pinto	06 Feb 2024 21:39:35	Accepted
{DevOps} A historical review and Future works	Gokarna, Mayank and Singh, Raju	2		Marcelo Pinto	06 Feb 2024 21:39:35	Accepted
Parallelware Tools: An Experimental Evaluation on {POWER}Systems	Arenaz, Manuel and Martorell, Xavier	2	-	Marcelo Pinto	06 Feb 2024 21:39:35	Accepted
Enabling Automated Machine Learning for model-Driven {AI}Engineering	Moin, Armin and Wattanavaekin, Ukrit and Lungu, Alexandraand Challenger, Moharram and Badii, Atta and G{\"u}nnemann,Stephan	2	2022	Marcelo Pinto	06 Feb 2024 21:39:35	Rejected
Development and evaluation of dental image exchange and management system: A user-centered perspective	Rahimi, B and Karimian, S and Ghaznavi, A and Heydarlou, MJafari	2	2022	Marcelo Pinto	06 Feb 2024 21:39:35	Rejected
An Integrated Framework for {DevSecOps} Adoption	Gupta, Akanksha	2		Marcelo Pinto	06 Feb 2024 21:39:35	Accepted
The role of diversity in cybersecurity risk analysis: Anexperimental plan	Tuma, Katja and Van Der Lee, Romy	2	2022	Marcelo Pinto	06 Feb 2024 21:39:35	Accepted

Implementation of DevSecOps by Integrating Static and Dynamic Security Testing in CI/CD Pipelines	Putra, Agung Maulana and Kabetta, Herman		2022	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
Towards a hypothetical framework to secure DevOps adoption: Grounded theory approach	Rafi, Saima and Yu, Wu and Akbar, Muhammad Azeem		2020	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
Empirical analysis of security-related code reviews in npm packages	Alfadel, Mahmoud and Nagy, Nicholas Alexandre and Costa, Diego Elias and Abdalkareem, Rabe and Shihab, Emad	Journal of Systems and Software	2023	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Deliver Uncompromised	Nissen, Chris and Gronager, John and Robert Metzger, JD and Harvey Rishikof, JD		2018	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Data Consistency for Magnetic Resonance Imaging	Karkalousos, Dimitrios and Caan, Matthan		2021	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
[課題研究報告書] DevSecOps スキームにおいて脆弱性逓減を可能にする OSS ベースの環境調査	森健太郎		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Facilitating the Management of Agile and Devops Activities: Implementation of a Data Consolidator	Doukoure, Gaoussou Abdel Kader and Mnkandla, Ernest		2018	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
A Unified Framework for Automating Software Security Analysis in DevSecOps	Aljohani, Mohammad A. and Alqahtani, Sultan S.		2023	Marcelo Pinto	07 Feb 2024 18:02:29	Accepted
The DevOps Reference Architecture Evaluation : A Design Science Research Case Study	Ghantous, Georges Bou and Gill, Asif		2020	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
ISO/IEC/IEEE International StandardInformation technologyDevOpsBuilding reliable and secure systems including		ISO/IEC/IEEE Std 32675:2022	2022	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted

application build, package and deployment						
Implementing DevOps Practices in CPPS Using Microservices and GitOps	Koren, István and Rinker, Felix and Meixner, Kristof and Kröger, Moritz and Zeng, Michael		2023	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Implementation of a Continuous Integration and Deployment Pipeline for Containerized Applications in Amazon Web Services Using Jenkins, Ansible and Kubernetes	Cepuc, Artur and Botez, Robert and Craciun, Ovidiu and Ivanciu, lustin-Alexandru and Dobrota, Virgil		2020	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Towards an IT Governance of DevOps Metamodel	Hamzane, Ibrahim and Khalyly, Badr EL	:	2021	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Design and Implementation of Security Test Pipeline based on DevSecOps	Sun, Xiaohan and Cheng, Yunchang and Qu, Xiaojie and Li, Hang		2021	Marcelo Pinto	07 Feb 2024 18:02:30	Accepted
Agile and Secure Software Development	Baral Pokharel, Krishant	:	2022	Marcelo Pinto	13 mar. 2024 01:55:41	
Safe and secure model-driven design for embedded systems	Li, Letitia	:	2018	Marcelo Pinto	13 mar. 2024 01:51:20	
A Model For Measuring Improvement Of Security In Continuous Integration pipelines: Metrics and Four-Axis Maturity Driven DevSecOps (MFAM)	Akujobi, Joshua Chukwukamneleanya		2021	Marcelo Pinto	13 mar. 2024 01:47:55	Accepted
Reflecting on recurring failures in {IoT} development	Anandayuvaraj, Dharun and Davis, James C	:	2022	Marcelo Pinto	06 Feb 2024 21:39:35	Rejected
Hands-On Security in DevOps: Ensure continuous security, deployment, and delivery with DevSecOps	Hsu, Tony Hsiang-Chih	:	2018	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
OpenSource tools for a secdevops pipeline	Canyelles Toledano, Mart{\'\i}	:	2022	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted

Security Processes	Lad, Sagar		2022	Marcelo Pinto	06 Feb 2024 20:54:40	Rejected
Securing CI/CD Pipeline: Automating the detection of misconfigurations and integrating security tools	Mangla, Muskan		2023	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
Practical Security for Agile and DevOps	Merkow, Mark S		2022	Marcelo Pinto	06 Feb 2024 20:54:40	Rejected
Architecture Scheme of DevOps for Cross Network and Multiple Environment Collaboration	Liu, Li and Xie, Dongmei and Cheng, YunChang and Li, Gongliang		2021	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
Research Findings in the Domain of CI/CD and DevOps on Security Compliance	Bobbert, Yuri and Chtepen, Maria		2021	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
Improve software quality through practicing DevOps	Perera, Pulasthi and Silva, Roshali and Perera, Indika		2017	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
Towards modeling framework for devops: Requirements derived from industry use case	Bordeleau, Francis and Cabot, Jordi and Dingel, Juergen and Rabil, Bassem S and Renaud, Patrick		2020	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
Challenges and solutions when adopting DevSecOps: A systematic review	Rajapakse, Roshan N and Zahedi, Mansooreh and Babar, M Ali and Shen, Haifeng	Information and software technology	2022	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
Linux Capabilities: Autonomously Securing LXC Containers within the DevSecOps Pipeline	Orechovesky, Andrew David		2021	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
DevSecOps for web applications: a case study	Gon{\c{c}}alves, Diogo Henrique Ara{\'u}jo		2022	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted
Practical security automation and testing: tools and techniques for	Hsu, Tony Hsiang-Chih		2019	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted

automated security scanning and testing in devsecops						
Implementation of secure workflow for DevOps from best practices viewpoint	Lamponen, Niclas		2021	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
DevSecOps: Integrating Security in DevOps for Financial Applications	Zhou, Jihai	Future And Fintech, The: Abcdi And Beyond	2022	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Evaluating C/C++ Vulnerability Detectability of Query-Based Static Application Security Testing Tools	Li, Zongjie and Liu, Zhibo and Wong, Wai Kin and Ma, Pingchuan and Wang, Shuai	IEEE Transactions on Dependable and Secure Computing	2024	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Open Source Solutions for Vulnerability Assessment: A Comparative Analysis	Cruz, Dinis B and Almeida, Jo{\~a}o R and Oliveira, Jos{\'e} L	IEEE Access	2023	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Security Consideration of Each Layers in a Cloud-Native Environment	Kim, Youngsoo and Park, Cheolhee and Shin, Yong-yoon	Communications in Computer and Information Science	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
An analysis and classification of public information security data sources used in research and practice	Sauerwein, Clemens and Pekaric, Irdin and Felderer, Michael and Breu, Ruth	Computers and Security	2019	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Mathematical Approaches Transform Cybersecurity from Protoscience to Science	Trenchev, Ivan and Dimitrov, Willian and Dimitrov, Georgi and Ostrovska, Tanya and Trencheva, Miglena	Applied Sciences (Switzerland)	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Understanding security implications of using containers in the cloud	Tak, Byungchul and Isci, Canturk and Duri, Sastry and Bila, Nilton and Nadgowda, Shripad and Doran, James	Proceedings of the 2017 USENIX Annual Technical Conference, USENIX ATC 2017	2019	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Risk Considerations for MobileDevice implementations	Parker, Mitchell	Mobile Medicine: Overcoming People, Culture, and Governance	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected

Real-Time and Retrospective Analyses of Cyber Security	Bird, David Anthony	Real-Time and Retrospective Analyses of Cyber Security	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
A Large-scale Fine-grained Empirical Study on Security Concerns in Open-source Software	Nocera, Sabato and Romano, Simone and Francese, Rita and Scanniello, Giuseppe	Proceedings - 2023 49th Euromicro Conference on Software Engineering and Advanced Applications, SEAA 2023	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Take Over the Whole Cluster: Attacking Kubernetes via Excessive Permissions of Third-party Applications	Yang, Nanzi and Shen, Wenbo and Li, Jinku and Liu, Xunqi and Guo, Xin and Ma, Jianfeng	CCS 2023 - Proceedings of the 2023 ACM SIGSAC Conference on Computer and Communications Security	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Security Requirements as Code: Example from VeriDevOps Project	Ismaeel, Khaled and Naumchev, Alexandr and Sadovykh, Andrey and Truscan, Dragos and Enoiu, Eduard Paul and Seceleanu, Cristina	Proceedings of the IEEE International Conference on Requirements Engineering	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Agent-based zerologon vulnerability detection	Bezzateev, S.V. and Fomicheva, S.G. and Zhemelev, G.A.	Wave Electronics and its Application in Information and Telecommunication Systems, WECONF - Conference Proceedings	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Awareness of secure coding guidelines in the industry - A first data analysis	Gasiba, Tiago Espinha and Lechner, Ulrike and Pinto-Albuquerque, Maria and Fernandez, Daniel Mendez	Proceedings - 2020 IEEE 19th International Conference on Trust, Security and Privacy in Computing and Communications, TrustCom 2020	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected

Insecure Software on a Fragmenting Internet	Ryan, Ita and Roedig, Utz and Stol, Klaas-Jan	2022 Cyber Research Conference - Ireland, Cyber-RCI 2022	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Cross Container Attacks: The Bewildered eBPF on Clouds	He, Yi and Guo, Roland and Xing, Yunlong and Che, Xijia and Sun, Kun and Liu, Zhuotao and Xu, Ke and Li, Qi	Symposium, USENIX	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
"Open Weakness and vulnerability modeler" (OVVL): An updated approach to threat modeling	Schaad, Andreas and Reski, Tobias	ICETE 2019 - Proceedings of the 16th International Joint Conference on e-Business and Telecommunications	2019	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Real-Time Monitoring and Management of Hardware and Software Resources in Heterogeneous Computer Networks through an Integrated System Architecture	Aldea, Constantin Lucian and Bocu, Razvan and Solca, Robert Nicolae	Symmetry	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Efficient feature selection for static analysis vulnerability prediction	Filus, Katarzyna and Boryszko, Paweł and Domańska, Joanna and Siavvas, Miltiadis and Gelenbe, Erol	Sensors (Switzerland)	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
BASTION: A security enforcement network stack for container networks	Nam, Jaehyun and Lee, Seungsoo and Seo, Hyunmin and Porras, Phillip and Yegneswaran, Vinod and Shin, Seungwon	Proceedings of the 2020 USENIX Annual Technical Conference, ATC 2020	2020	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Hacksaw: Hardware-Centric Kernel Debloating via Device Inventory and Dependency Analysis	Hu, Zhenghao and Lee, Sangho and Peinado, Marcus	CCS 2023 - Proceedings of the 2023 ACM SIGSAC Conference on Computer and Communications Security	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected

X-Containers: Breaking Down Barriers to Improve Performance and Isolation of Cloud-Native Containers	Shen, Zhiming and Sun, Zhen and Sela, Gur-Eyal and Bagdasaryan, Eugene and Delimitrou, Christina and Van Renesse, Robbert and Weatherspoon, Hakim	International Conference on Architectural Support for Programming Languages and Operating Systems - ASPLOS	2019	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Building Secure Cars: Assuring the Automotive Software Development Lifecycle	Oka, Dennis Kengo	Building Secure Cars: Assuring the Automotive Software Development Lifecycle	2021	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Alto: Lightweight VMs using Virtualization-aware Managed Runtimes	Larisch, James and Mickens, James and Kohler, Eddie	ACM International Conference Proceeding Series	2018	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
SHIL: Self-Supervised Hybrid Learning for Security Attack Detection in Containerized Applications	Lin, Yuhang and Tunde-Onadele, Olufogorehan and Gu, Xiaohui and He, Jingzhu and Latapie, Hugo	Proceedings - 2022 IEEE International Conference on Autonomic Computing and Self-Organizing Systems, ACSOS 2022	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Security in Cloud-Native Services: A Survey	Theodoropoulos, Theodoros and Rosa, Luis and Benzaid, Chafika and Gray, Peter and Marin, Eduard and Makris, Antonios and Cordeiro, Luis and Diego, Ferran and Sorokin, Pavel and Girolamo, Marco Di and Barone, Paolo and Taleb, Tarik and Tserpes, Konstantinos	Journal of Cybersecurity and Privacy	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
Secure Inter-Container Communications Using XDP/eBPF	Nam, Jaehyun and Lee, Seungsoo and Porras, Phillip and Yegneswaran, Vinod and Shin, Seungwon	IEEE/ACM Transactions on Networking	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted

Identifying personal data processing for code review	Tang, Feiyang and {\O}stvold, Bjarte M and Bruntink, Magiel		2023	Marcelo Pinto	06 Feb 2024 21:39:36	Accepted
A Systematic Framework for Addressing Critical Challenges in Adopting DevOps Culture in Software Development: A PLS-SEM Perspective	Khattak, Kausar-Nasreen and Qayyum, Faiza and Naqvi, Syed Shehryar Ali and Mehmood, Asif and Kim, Jungsuk	IEEE Access	2023	Marcelo Pinto	07 Feb 2024 13:06:31	Accepted
OSS 추적성을 위한 SBOM 동향	김선우 and 손경호	정보보호학회지	2022	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Cybersecurity Blue Team Strategies: Uncover the secrets of blue teams to combat cyber threats in your organization	Sehgal, Kunal and Thymianis, Nikolaos		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Using Secure Software Engineering Metrics to support the automated calculation and visualization of Team Security Maturity in Agile Development Projects	Zandonella, Timo			Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Best Practices for commercial use of open source software: Business models	Popp, Karl Michael		2019	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected
Securing Open Source Libraries	Podjarny, Guy		2017	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Secure, resilient, and agile software development	Merkow, Mark		2019	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Definition of a DevSecOps Operating Model for software development in a large Enterprise	Tortoriello, Valentina		2022	Marcelo Pinto	06 Feb 2024 20:54:40	Accepted

Software Composition Analysis for Vulnerability Detection: An Empirical Study on Java Projects	Zhao, Lida and Chen, Sen and Xu, Zhengzi and Liu, Chengwei and Zhang, Lyuye and Wu, Jiahui and Sun, Jun and Liu, Yang	ESEC/FSE 2023 - Proceedings of the 31st ACM Joint Meeting European Software Engineering Conference and Symposium on the Foundations of Software Engineering	2023	Marcelo Pinto	07 Feb 2024 12:52:29	Accepted
5GFIVer: Functional Integrity Verification for 5G Cloud-Native Network Functions	Asadujjaman, A.S.M. and Kabir, Mohammad Ekramul and Purohit, Hinddeep and Majumdar, Suryadipta and Wang, Lingyu and Jarraya, Yosr and Pourzandi, Makan	on Cloud Computing	2022	Marcelo Pinto	07 Feb 2024 12:52:29	Rejected
Smart Contract and DevSecOps	Zanfardino, Diego		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Accepted
Success Factors in Secure Software Development of Cloud Applications in Germany: A Qualitative-explorative Expert Study	Schubert, Marc and Pagel, Sven and Von Korflesch, Harald		2023	Marcelo Pinto	06 Feb 2024 20:54:41	Rejected

# 4. Pontuação dos artigos

	Quality Score
Smart Contract and DevSecOps	1.0
Software Composition Analysis for Vulnerability Detection: An Empirical Study on Java Projects	3.5
Definition of a DevSecOps Operating Model for software development in a large Enterprise	3.5
Secure, resilient, and agile software development	4.0
Securing Open Source Libraries	4.0
Using Secure Software Engineering Metrics to support the automated calculation and visualization of Team Security Maturity in Agile Development Projects	0.5
A Systematic Framework for Addressing Critical Challenges in Adopting DevOps Culture in Software Development: A PLS-SEM Perspective	0.0
Identifying personal data processing for code review	0.0
Secure Inter-Container Communications Using XDP/eBPF	1.0
Security in Cloud-Native Services: A Survey	0.5
BASTION: A security enforcement network stack for container networks	1.0
Efficient feature selection for static analysis vulnerability prediction	2.0
"Open Weakness and vulnerability modeler" (OVVL): An updated approach to threat modeling	1.5
Agent-based zerologon vulnerability detection	0.5
Take Over the Whole Cluster: Attacking Kubernetes via Excessive Permissions of Third-party Applications	0.0
A Large-scale Fine-grained Empirical Study on Security Concerns in Open-source Software	3.0
Open Source Solutions for Vulnerability Assessment: A Comparative Analysis	4.0
Practical security automation and testing: tools and techniques for automated security scanning and testing in devsecops	5.0
DevSecOps for web applications: a case study	1.0
Linux Capabilities: Autonomously Securing LXC Containers within the DevSecOps Pipeline	1.0
Challenges and solutions when adopting DevSecOps: A systematic review	4.0
Towards modeling framework for devops: Requirements derived from industry use case	3.0
Improve software quality through practicing DevOps	1.5
Research Findings in the Domain of CI/CD and DevOps on Security Compliance	2.0
Architecture Scheme of DevOps for Cross Network and Multiple Environment Collaboration	1.0

Securing CI/CD Pipeline: Automating the detection of misconfigurations and integrating security tools	3.5
OpenSource tools for a secdevops pipeline	4.0
Hands-On Security in DevOps: Ensure continuous security, deployment, and delivery with DevSecOps	4.0
A Model For Measuring Improvement Of Security In Continuous Integration pipelines: Metrics and Four-Axis Maturity Driven DevSecOps (MFAM)	4.0
Safe and secure model-driven design for embedded systems	4.0
Agile and Secure Software Development	4.0
Design and Implementation of Security Test Pipeline based on DevSecOps	3.5
Towards an IT Governance of DevOps Metamodel	1.0
Implementation of a Continuous Integration and Deployment Pipeline for Containerized Applications in Amazon Web Services Using Jenkins, Ansible and Kubernetes	4.5
Implementing DevOps Practices in CPPS Using Microservices and GitOps	1.0
ISO/IEC/IEEE International StandardInformation technologyDevOpsBuilding reliable and secure systems including application build, package and deployment	0.0
The DevOps Reference Architecture Evaluation : A Design Science Research Case Study	3.0
Facilitating the Management of Agile and Devops Activities: Implementation of a Data Consolidator	1.5
Empirical analysis of security-related code reviews in npm packages	0.5
Towards a hypothetical framework to secure DevOps adoption: Grounded theory approach	4.0
Implementation of DevSecOps by Integrating Static and Dynamic Security Testing in CI/CD Pipelines	4.0
The role of diversity in cybersecurity risk analysis: Anexperimental plan	0.0
An Integrated Framework for {DevSecOps} Adoption	3.5
Parallelware Tools: An Experimental Evaluation on {POWER}Systems	2.0
{DevOps} A historical review and Future works	2.0
Software Development Analytics in practice: A systematic literature review	0.0
An introduction to adaptive software security	0.5
Software repositories and machine learning research in cybersecurity	3.0
Full-stack vulnerability analysis of the cloud-native platform	4.5
Kunerva: Automated Network Policy Discovery Framework for Containers	0.0
Why don't developers detect improper input validation? '; DROP TABLE Papers; -	2.0
Example-Based Vulnerability Detection and Repair in Java Code	2.5
<del></del>	

Keyword Extraction From Specification Documents for Planning Security Mechanisms	2.5
Topical issues related to certification tests of information security tools	0.5
Containers' Privacy and Data Protection via Runtime Scanning Methods	2.0
DAVS: Dockerfile Analysis for Container Image Vulnerability Scanning	4.0
Secure Software Development in the Era of Fluid Multi-party Open Software and Services	0.5
A model-based mode-switching framework based on security vulnerability scores	2.5
DevOps for containerized applications	1.0
A novel Security-by-Design methodology: Modeling and assessing security by SLAs with a quantitative approach	1.5
Reproducible Software Vulnerability Testing with IaC	3.5
Generating Tests for the Discovery of Security Flaws in Product Variants	0.0
From DevOps to DevSecOps is not enough. CyberDevOps: an extreme shifting-left architecture to bring cybersecurity within software security lifecycle pipeline	3.0
SEAF: A Scalable, Efficient, and Application-independent Framework for container security detection	2.5
CD3T: Cross-project dependency defect detection tool	3.5
The evolution of distributed systems towards microservices architecture	1.0
Towards automated security design flaw detection	2.5
Ambush from All Sides: Understanding Security Threats in Open-Source Software CI/CD Pipelines	0.5
Applying and Researching DevOps: A Tertiary Study	2.0
Embracing IaC Through the DevSecOps Philosophy: Concepts, Challenges, and a Reference Framework	3.5
Within-Project Defect Prediction of Infrastructure-as-Code Using Product and Process Metrics	2.5
Mitigating risks in software development through effectiverequirements engineering	0.0
{InferFix}: End-to-end program repair with {LLMs}	3.0
Machine learning based approach to recommend {MITRE}{ATT\&CK} framework for software requirements and design specifications	3.0
Secure Software Development: Issues and Challenges	2.0
Implementing and Automating Security Scanning to a DevSecOps CI/CD Pipeline	4.5
Design and Practice of Security Architecture via DevSecOps Technology	3.5
DevSecOps in Practice with VMware Tanzu: Build, run, and manage secure multi-cloud apps at scale on Kubernetes with the Tanzu portfolio	1.5

Unifying Governance, Risk and Controls Framework Using SDLC, CICD and DevOps	1.5
Infrastructure as Code as a Foundational Technique for Increasing the DevOps Maturity Level: Two Case Studies	1.0
Analysis on the Use of Declarative and Pull-based Deployment Models on GitOps Using Argo CD	2.5
Self-Service Cybersecurity Monitoring as Enabler for DevSecOps	2.0
Konveyor Move2Kube: A Framework For Automated Application Replatforming	0.0
A solution on cloud and digital transformation for IT system using DevOps yundao platform	0.5
A Framework of DevSecOps for Software Development Teams	4.0
Automated Software Testing Starting from Static Analysis: Current State of the Art	4.5
Kubernetes Near Real-Time Monitoring and Secure Network Architectures	1.0
Static Analysis	2.5
A transformer-based GitHub Action for Vulnerability Detection	1.5
Generic SAST tool comparer	1.0
Guidelines on minimum standards for developer verification of software	2.0
Vulnerability exploration and understanding services	0.0
An Empirical Study on the Use of Static Analysis Tools in Open Source Embedded Software	2.0
Design and implementation of SFCI: A tool for security focused continuous integration	3.0
A Unified Framework for Automating Software Security Analysis in DevSecOps	4.0
Software Engineering Tools For Secure Application Development	3.5
Comparison and Evaluation on Static Application Security Testing (SAST) Tools for Java	3.5
Securing the Software Development Life Cycle	4.0
Towards Practical Cybersecurity Mapping of STRIDE and CWE - A Multi-perspective Approach	4.0
Software for Improve the Security of Kubernetes-based CI/CD Pipeline	3.5

## 5. Quadro com as principais referências identificadas

# RESUMO DAS PRINCIPAIS REFERÊNCIAS IDENTIFICADAS

AUTOR	VISÃO GERAL	SUGERE	FERRAMENTAS	AUTOMA ÇÃO
mohammed2017 exploring	Identificou 52 abordagens (top 5) 1) secure requirements modeling, 2) vulnerability identification, adaption and mitigation, 3) software security focused process, 4) extended UML-based secure modeling profiles e 5) non UML-based secure modeling notations	Usar SAST e DAST	N/I	N/I
assal2018securit y	Identificou os estágios: Design Stage, Implementation stage, Developer testing stage, Code analysis stage, Code review stage, Post-development testing stage	Usar uma das inciativas (MSSDL,OWASP ou BSIIM) para usar nas 12 práticas que identificou	N/I	N/I
karim2016pratic e	Propoe modelo com 5 etapas: Gerenciamento do projeto, Etapa de Requerimentos, Etapa de Desenho, Etapa de Implementação e Etapa de Teste	Plano de desenvolvimento	N/I	N/I
luz2019adopting	O que é necessário para implantar DevOps	Pano de implantação DevOps	N/I	
gonccalves2022 devsecops	Compara modelos para fazer analogia ao DevOps	Plano de implantação de DevOps com automação	N/I	Pipeline
leite2019survey,	Propõe um modelo conceitual composto de 4 categorias:pessoas, runtime, entrega e processo	Pano de implantação DevOps	N/I	
akujobi2021mod	Propõe a implantação de framework para	Usar CVE, OWASP	OWASP ZAP, Puppet, CircleCI, Splunk, Gitlab,	Pipeline

el	Devops		IAST	
zhao2023softwa re	Classifica o modelo de avaliação SCA em 3 aspectos: Modos, Métodos e escopo	Propõe solução para varredura de código de terie	OWASP Dependency Check	Pipeline
tortoriello2022de finition	Framework dividido em 3 fases: Governança, Desenvolvimento e Operação	Sugere que a tecnologia seja a última coisa a ser considerada. Primeiro os processos e as pessoas para implementá-lo. Adoção de padrões: OWASP Top 10, SANS top 25 ou CERT Coding Standards	JIRA, GitHub ou Gitlab, Maven, Jenkins, Nexus, Docker, Kubernetes, Terraform, Datadog, SonarQube, Mend SCA, acutinex, Veracode, AppScanApSca	Pipeline
merkow2019sec ure	Foca em explicar com os controles de segurança afetam a forma como o software é desenvolvido atualmente	Plano de desenvolvimento	N/I	N/I

hsu2018hands	Fala de 3 níveis de maturidade de práticas DevOps CI, CD e CDE	OWASP SAMM, OWASP Top 10 e CWE/SANS Top 25 Monitoramento de configuração	Jenkins, Git, Teste unitário, IaC (Puppet), Docker, NMAP, OpenVAS,FindBugs for Java, Infer do Java, OWASP dependency check, OWASP ZAP, Archni-Scanner, Burp Suite, SQLMap, w3afm, Nmap, NCAT, Wireshark, SSLScan,sslyz, OpenSCAP, InSpec, Pentest Box for Windows,Kali Linux,Mobile Security Testing Framework, ELK, MISP-Open Source Threat Intelligence Platform, OSSCE-Open Souce HIDS Security, Facebook/osquery-performance endpoint visibility, Alien Valt OSSIM-Open Source, SIEM	Pipeline
hsu2019practica	Proposta de framework para automação de segurança, devendo cemeçar OWASP top 10 application security risks e CWE top 25 softwares errors	Testes funcionais, de API, Mock, SAST, Testes BDD e geradore de dados DDT	Arachni, OWASP ZAP, OWASP Depency Check, OpenVAS, RetireJS, Radamsa, SecList, FuzzDB, NMap, SSL Labs-Scan, SSLyze, Visual Code Grpper (VCG) (Windows), Grep Rough Audit (baseado em Regex),Bandit (Python), OpenSCAP (Linux OS)	Script (CRI)
gupta2022integr ated	Recomenda a implantação de DevOps em pequenas etapas; Desenvolver a estratégia de implantação com base nos princípios: mindset "segurança-primeiro", Automação E CI/CD	Considerando ser a execução o ponto central, ir implementando aos poucos um framework tendo como base as seguintes ferramentas:	OWASP, SonarQube, Fortify, HashiCorp Vault	Pipeline
mangla2023sec uring	Apresenta uma solução de segurança para AWS, utilizando o Github como repositório;	Adoção de o mínimo padrão	Github Actions, Terraform AWS Security Hub, Cloud Inspector, Prowler e ScouteSuite	Pipeline

canyelles2022o pensource	Estuda as ferramentas para adicionar a um pipeline de SecDevOps	Implementação de pipeline DevSecOps	Sugere o uso das ferramentas: Vault, Research Code Scanning, CodeQl, Semgrep, SonarQube, Research Secret management, Docker Swarm and .env file, GitGuardian, Self update Dependencies, Research Container Scanning, Trivy e Grype	Pipeline
li2018safe	Discorre sobre os modelos de SDLC: Agile, Cascata e V	Plano de desenvolvimento	N/I	
cruz2023open	Faz uma explanação geral sobre os conceitos gerais inerentes ao desenvolvimento de software seguro	Implantação de framework	Docker, relatório em SARIF, Horusec (code scanning), Dockle, Hadolint e Trivy (image issues), GitLeaks, Dependency Check (SCA), OWASP Zap (DAST)	Pipeline
putra2022imple mentation	Apresentou um framework nas seguintes etapas: Continuous Development, Continuous Testing, Continuous Integration, Continuous Deploymen e Continuous Monitoring	Uso de SAST e DAST	N/I	N/I