**Querying in digital libraries:**

Table 1: Query search from 2010 - 2022:

|  |  |  |  |
| --- | --- | --- | --- |
| **Digital library** | **Link** | #Studies | 2024 Oct 31 |
| **IEEExplore: ("software engineering" AND (AI OR "AI-based" OR "AI-powered" OR "AI-enabled") AND ("agile" OR “scrum” OR “kanban")** | **https://ieeexplore.ieee.org/search/searchresult.jsp?action=search&matchBoolean=true&queryText=((%22software%20engineering%22%20OR%20%22requirement%20specification%22%20OR%20%22requirements%20engineering%22%20OR%20%22software%20construction%22%20OR%20%22software%20design%22%20OR%20%22software%20architecture%22%20OR%20%22software%20implementation%22%20OR%20%0A%22software%20testing%22%20OR%20%22software%20deployment%22%20OR%20%22software%20maintenance%22%20OR%20%22user%20support%22%20OR%20%22software%20release%22%20OR%20%22software%20analysis%22%20OR%20%22software%20configuration%20management%22%20OR%20%22software%20quality%22)%0AAND%20%0A(%22AI-based%22%20OR%20%22AI-powered%22%20OR%20%22AI-enabled%22%20OR%20%22artificial%20intelligence-based%22%20OR%20%22artificial%20intelligence-powered%22%20OR%20%22artificial%20intelligence-enabled%22%20OR%20%22ML-based%22%20OR%20%22ML-powered%22%20OR%20%22ML-enabled%22%20OR%20%22intelligent%20software%22%20OR%20%22AI-augmented%22%20or%20%22ML-augmented%22%20OR%20%22AI-infused%22%20OR%20%22ML%20software%22%20OR%20%22AI%20software%22)%0AAND%20%0A(agile%20OR%20scrum%20OR%20kanban%20OR%20waterfall%20OR%20spiral%20OR%20%22component-based%22%20OR%20DevOps%20OR%20iterative%20OR%20lean%20OR%20%22extreme%20programming%22)%0A)&highlight=true&returnFacets=ALL&returnType=SEARCH&matchPubs=true&ranges=2010\_2022\_Year** | 32 | 37 |
| **ACM DL:** | **https://dl.acm.org/action/doSearch?fillQuickSearch=false&target=advanced&expand=dl&AllField=Abstract%3A%28%28%22software+engineering%22+OR+%22requirement+specification%22+OR+%22requirements+engineering%22+OR+%22software+construction%22+OR+%22software+design%22+OR+%22software+architecture%22+OR+%22software+implementation%22+OR+%22software+testing%22+OR+%22software+deployment%22+OR+%22software+maintenance%22+OR+%22user+support%22+OR+%22software+release%22+OR+%22software+analysis%22+OR+%22software+configuration+management%22+OR+%22software+quality%22%29+AND+%28%22AI-based%22+OR+%22AI-powered%22+OR+%22AI-enabled%22+OR+%22artificial+intelligence-based%22+OR+%22artificial+intelligence-powered%22+OR+%22artificial+intelligence-enabled%22+OR+%22ML-based%22+OR+%22ML-powered%22+OR+%22ML-enabled%22+OR+%22intelligent+software%22+OR+%22AI-augmented%22+or+%22ML-augmented%22+OR+%22AI-infused%22+OR+%22ML+software%22+OR+%22AI+software%22%29+AND+%28agile+OR+scrum+OR+kanban+OR+waterfall+OR+spiral+OR+%22component-based%22+OR+DevOps+OR+iterative+OR+lean+OR+%22extreme+programming%22%29%29&startPage=&AfterYear=2010&BeforeYear=2022&queryID=1/5121936430** | **23** | **28** |
| **SpringerLink:** | **https://link.springer.com/search?date-facet-mode=between&facet-start-year=2010&showAll=true&facet-end-year=2023&dc.title=%22software+engineering%22+AND++%28%22AI-based%22+OR+%22AI-powered%22+OR+%22AI-enabled%22+OR+%22ML-based%22+OR+%22intelligent+software%22+OR+%22AI-infused%22+OR+%22AI+software%22%29+AND+%E2%80%9Cagile%E2%80%9D** | **33** | **47** |
| **Elsevier/ScienceDirect** | https://www.sciencedirect.com/search?date=2010-2023&qs=%22software%20engineering%22%0AAND%20%0A%28%22AI-based%22%20OR%20%22AI-powered%22%20OR%20%22AI-enabled%22%20OR%20%22ML-based%22%20OR%20%22intelligent%20software%22%20OR%20%22AI-infused%22%20OR%20%22AI%20software%22%29%0AAND%0A%E2%80%9Cagile%E2%80%9D | **128 (with mini-query) supports max 8 terms** | **129 (76+ 53)** |
| **Scopus:** | ( "software engineering"  OR  "requirement specification"  OR  "requirements engineering"  OR  "software construction"  OR  "software design"  OR  "software architecture"  OR  "software implementation"  OR  "software testing"  OR  "software deployment"  OR  "software maintenance"  OR  "user support"  OR  "software release"  OR  "software analysis"  OR  "software configuration management"  OR  "software quality" )  AND  ( "AI-based"  OR  "AI-powered"  OR  "AI-enabled"  OR  "artificial intelligence-based"  OR  "artificial intelligence-powered"  OR  "artificial intelligence-enabled"  OR  "ML-based"  OR  "ML-powered"  OR  "ML-enabled"  OR  "intelligent software"  OR  "AI-augmented"  OR  "ML-augmented"  OR  "AI-infused"  OR  "ML software"  OR  "AI software" )  AND  "agile"  AND  PUBYEAR  >  2009  AND  PUBYEAR  <  2024  AND  ( LIMIT-TO ( SRCTYPE ,  "j" )  OR  LIMIT-TO ( SRCTYPE ,  "p" ) )  AND  ( LIMIT-TO ( SUBJAREA ,  "COMP" )  OR  LIMIT-TO ( SUBJAREA ,  "ENGI" )  OR  EXCLUDE ( SUBJAREA ,  "SOCI" )  OR  EXCLUDE ( SUBJAREA ,  "BUSI" )  OR  EXCLUDE ( SUBJAREA ,  "MATE" )  OR  EXCLUDE ( SUBJAREA ,  "PHYS" )  OR  EXCLUDE ( SUBJAREA ,  "BIOC" )  OR  EXCLUDE ( SUBJAREA ,  "ENER" )  OR  EXCLUDE ( SUBJAREA ,  "MEDI" )  OR  EXCLUDE ( SUBJAREA ,  "NEUR" )  OR  EXCLUDE ( SUBJAREA ,  "AGRI" )  OR  EXCLUDE ( SUBJAREA ,  "CENG" )  OR  EXCLUDE ( SUBJAREA ,  "ARTS" )  OR  EXCLUDE ( SUBJAREA ,  "MATH" )  OR  EXCLUDE ( SUBJAREA ,  "DECI" )  OR  EXCLUDE ( SUBJAREA ,  "MULT" ) )  AND  ( LIMIT-TO ( DOCTYPE ,  "ar" )  OR  LIMIT-TO ( DOCTYPE ,  "cp" ) )  AND  ( LIMIT-TO ( LANGUAGE ,  "English" ) ) | **196** |  |

Table 2: Query search for 2023 and 2024:

|  |  |  |  |
| --- | --- | --- | --- |
| library | Query | +query | Selected ones |
| ACM-DL | https://dl.acm.org/action/doSearch?fillQuickSearch=false&target=advanced&expand=dl&AllField=Abstract%3A%28%28%22software+engineering%22+OR+%22requirement+specification%22+OR+%22requirements+engineering%22+OR+%22software+construction%22+OR+%22software+design%22+OR+%22software+architecture%22+OR+%22software+implementation%22+OR+%22software+testing%22+OR+%22software+deployment%22+OR+%22software+maintenance%22+OR+%22user+support%22+OR+%22software+release%22+OR+%22software+analysis%22+OR+%22software+configuration+management%22+OR+%22software+quality%22%29+AND+%28%22AI-based%22+OR+%22AI-powered%22+OR+%22AI-enabled%22+OR+%22artificial+intelligence-based%22+OR+%22artificial+intelligence-powered%22+OR+%22artificial+intelligence-enabled%22+OR+%22ML-based%22+OR+%22ML-powered%22+OR+%22ML-enabled%22+OR+%22intelligent+software%22+OR+%22AI-augmented%22+or+%22ML-augmented%22+OR+%22AI-infused%22+OR+%22ML+software%22+OR+%22AI+software%22%29+AND+%28agile+OR+scrum+OR+kanban+OR+waterfall+OR+spiral+OR+%22component-based%22+OR+DevOps+OR+iterative+OR+lean+OR+%22extreme+programming%22%29%29&AfterYear=2023&BeforeYear=2024&queryID=39/7865571096 | 5 (2+3) | <https://dl.acm.org/doi/10.1145/3593434.3593453>  <https://dl.acm.org/doi/10.1145/3664646.3676277>  <https://dl.acm.org/doi/10.1145/3597503.3639194> |
| IEEE | https://ieeexplore.ieee.org/search/searchresult.jsp?action=search&matchBoolean=true&queryText=((%22software%20engineering%22%20OR%20%22requirement%20specification%22%20OR%20%22requirements%20engineering%22%20OR%20%22software%20construction%22%20OR%20%22software%20design%22%20OR%20%22software%20architecture%22%20OR%20%22software%20implementation%22%20OR%20%0A%22software%20testing%22%20OR%20%22software%20deployment%22%20OR%20%22software%20maintenance%22%20OR%20%22user%20support%22%20OR%20%22software%20release%22%20OR%20%22software%20analysis%22%20OR%20%22software%20configuration%20management%22%20OR%20%22software%20quality%22)%0AAND%20%0A(%22AI-based%22%20OR%20%22AI-powered%22%20OR%20%22AI-enabled%22%20OR%20%22artificial%20intelligence-based%22%20OR%20%22artificial%20intelligence-powered%22%20OR%20%22artificial%20intelligence-enabled%22%20OR%20%22ML-based%22%20OR%20%22ML-powered%22%20OR%20%22ML-enabled%22%20OR%20%22intelligent%20software%22%20OR%20%22AI-augmented%22%20or%20%22ML-augmented%22%20OR%20%22AI-infused%22%20OR%20%22ML%20software%22%20OR%20%22AI%20software%22)%0AAND%20%0A(agile%20OR%20scrum%20OR%20kanban%20OR%20waterfall%20OR%20spiral%20OR%20%22component-based%22%20OR%20DevOps%20OR%20iterative%20OR%20lean%20OR%20%22extreme%20programming%22)%0A)&highlight=true&returnType=SEARCH&matchPubs=true&returnFacets=ALL&ranges=2023\_2024\_Year | 32 (17+15) | <https://ieeexplore.ieee.org/document/10229464/>  <https://ieeexplore.ieee.org/document/10273881/>  <https://ieeexplore.ieee.org/document/10291438/>  <https://ieeexplore.ieee.org/document/10467750/>  <https://ieeexplore.ieee.org/document/10556246/>  <https://ieeexplore.ieee.org/document/10556295/>  <https://ieeexplore.ieee.org/document/10669873/> |
| Springer | https://link.springer.com/search?date-facet-mode=between&facet-start-year=2023&showAll=true&facet-end-year=2024&dc.title=%22software+engineering%22+AND++%28%22AI-based%22+OR+%22AI-powered%22+OR+%22AI-enabled%22+OR+%22ML-based%22+OR+%22intelligent+software%22+OR+%22AI-infused%22+OR+%22AI+software%22%29+AND+%E2%80%9Cagile%E2%80%9D | 30 (14+16) | <https://link.springer.com/chapter/10.1007/978-3-031-42622-3_49>  <https://link.springer.com/chapter/10.1007/978-981-99-2446-2_24>  <https://link.springer.com/chapter/10.1007/978-3-031-46002-9_23> |
| ScieneDirect | https://www.sciencedirect.com/search?date=2023-2024&qs=%22software%20engineering%22%0AAND%20%0A%28%22AI-based%22%20OR%20%22AI-powered%22%20OR%20%22AI-enabled%22%20OR%20%22ML-based%22%20OR%20%22intelligent%20software%22%20OR%20%22AI-infused%22%20OR%20%22AI%20software%22%29%0AAND%0A%E2%80%9Cagile%E2%80%9D&articleTypes=REV%2CFLA%2COSP&lastSelectedFacet=articleTypes | 129 (53+76) | <https://www.sciencedirect.com/science/article/pii/S187705092301414X>  <https://www.sciencedirect.com/science/article/pii/S266730532300056X> |
| Scopus | ( "software engineering"  OR  "requirement specification"  OR  "requirements engineering"  OR  "software construction"  OR  "software design"  OR  "software architecture"  OR  "software implementation"  OR  "software testing"  OR  "software deployment"  OR  "software maintenance"  OR  "user support"  OR  "software release"  OR  "software analysis"  OR  "software configuration management"  OR  "software quality" )  AND  ( "AI-based"  OR  "AI-powered"  OR  "AI-enabled"  OR  "artificial intelligence-based"  OR  "artificial intelligence-powered"  OR  "artificial intelligence-enabled"  OR  "ML-based"  OR  "ML-powered"  OR  "ML-enabled"  OR  "intelligent software"  OR  "AI-augmented"  OR  "ML-augmented"  OR  "AI-infused"  OR  "ML software"  OR  "AI software" )  AND  "agile"  AND  PUBYEAR  >  2022  AND  PUBYEAR  <  2024  AND  ( LIMIT-TO ( SRCTYPE ,  "j" )  OR  LIMIT-TO ( SRCTYPE ,  "p" ) )  AND  ( LIMIT-TO ( SUBJAREA ,  "COMP" )  OR  LIMIT-TO ( SUBJAREA ,  "ENGI" )  OR  EXCLUDE ( SUBJAREA ,  "SOCI" )  OR  EXCLUDE ( SUBJAREA ,  "BUSI" )  OR  EXCLUDE ( SUBJAREA ,  "MATE" )  OR  EXCLUDE ( SUBJAREA ,  "PHYS" )  OR  EXCLUDE ( SUBJAREA ,  "BIOC" )  OR  EXCLUDE ( SUBJAREA ,  "ENER" )  OR  EXCLUDE ( SUBJAREA ,  "MEDI" )  OR  EXCLUDE ( SUBJAREA ,  "NEUR" )  OR  EXCLUDE ( SUBJAREA ,  "AGRI" )  OR  EXCLUDE ( SUBJAREA ,  "CENG" )  OR  EXCLUDE ( SUBJAREA ,  "ARTS" )  OR  EXCLUDE ( SUBJAREA ,  "MATH" )  OR  EXCLUDE ( SUBJAREA ,  "DECI" )  OR  EXCLUDE ( SUBJAREA ,  "MULT" ) )  AND  ( LIMIT-TO ( DOCTYPE ,  "ar" )  OR  LIMIT-TO ( DOCTYPE ,  "cp" ) )  AND  ( LIMIT-TO ( LANGUAGE ,  "English" ) ) |  |  |

Master Query:

Option-1

**("software engineering" OR "requirement specification" OR "requirements engineering" OR "software construction" OR "software design" OR "software architecture" OR "software implementation" OR "software testing" OR "software deployment" OR "software maintenance" OR "user support" OR "software release" OR "software analysis" OR "software configuration management" OR "software quality")**

**AND**

**("AI-based" OR "AI-powered" OR "AI-enabled" OR "artificial intelligence-based" OR "artificial intelligence-powered" OR "artificial intelligence-enabled" OR "ML-based" OR "ML-powered" OR "ML-enabled" OR "intelligent software" OR "AI-augmented" or "ML-augmented" OR "AI-infused" OR "ML software" OR "AI software")**

**AND**

**(agile OR scrum OR kanban OR waterfall OR spiral OR "component-based" OR DevOps OR iterative OR lean OR "extreme programming")**

Option-2 with based/powered/enabled with a separate AND operators:

**("software engineering" OR "requirement specification" OR "requirements engineering" OR "software construction" OR "software design" OR "software architecture" OR "software implementation" OR "software testing" OR "software deployment" OR "software maintenance" OR "user support" OR "software release" OR "software analysis" OR "software configuration management" OR "software quality")**

**AND**

**("AI " OR "artificial intelligence " OR "ML" OR "intelligent software" OR "ML software" OR "AI software")**

**AND**

**("based" OR "powered" OR "enabled" OR "infused" OR "augmented")**

**AND**

**(agile OR scrum OR kanban OR waterfall OR spiral OR "component-based" OR DevOps OR iterative OR lean OR "extreme programming")**

**Mini-query:**

**"software engineering" AND “AI” AND “based” AND “agile”**

**Query for sciencedirect:**

**"software engineering"**

**AND**

**("AI-based" OR "AI-powered" OR "AI-enabled" OR "ML-based" OR "intelligent software" OR "AI-infused" OR "AI software")**

**AND**

**“agile”**

**Search criteria:**

* **2010 Jan – 2023 Jan**
* **English language**





