

Dear Software Engineering Practitioner,

Thank you for agreeing to participate in our survey to investigate the industrial relevance of research results in requirements engineering. Our aim is to understand how relevant research published in requirements engineering conferences is to industrial practitioners and, thus, your opinion is of high importance to us.

Taking part in this study involves completing a web survey that will take no longer than 15 minutes. This survey contains questions about your opinion on the relevance of some recently published research papers, each summarised in one sentence.

All data gathered will be anonymous from the time of collection. Therefore, there is no risk associated with the lack of privacy. There will be no direct benefits to you for participating in the survey, except for the long-term benefit of providing the outcomes to the research community in the hope to better steering research directions in a problem-driven manner. That is, the findings will provide insights to help software engineering research results provide more relevance to industrial practitioners. There are no risks to participating in this study. You may skip any questions you do not want to answer.

If you have questions about this study, please contact Daniel Méndez via [daniel.mendez\[at\]tum.de](mailto:daniel.mendez@tum.de).

If you consent to participate, click "Continue". Otherwise, please simply close the tab to end the survey.

Thanks and best regards,

Daniel Méndez, on behalf of the RE-Pract project team

Please rate the relevance of the single research summaries below. On the next page, you will have the possibility to briefly provide a rationale for one of the highest and lowest ratings.

**In your opinion, how important are the following pieces of**

## research?

Essential

Worthwhile

Unimportant

Unwise

A method for automatically recovering software traceability links between various software artifacts based on topic modelling (requirements, design, code, bug reports, test cases)



A set of two techniques for improving the quality of traces generated between regulatory standards and product level requirements



A case study on evaluating a given technique for identifying and prioritising stakeholders in order to involve the right stakeholders in system analysis



An experience report on the development of a methodology and tools for the formalization and subsequent validation of specifications in a project for the public administration



A document-driven study on the relevancy of clones in industrial requirements specifications and of clone detection as a requirements quality assurance technique



A case study on the effects of a highly ambiguous requirements document on project success





A data-driven study on the importance of quality requirements throughout the system lifecycle



An interview-based study with practitioners for identifying key challenges in aligning requirements and verification processes in order to assure that the developed software product satisfies customer requirements



A tool for automating ambiguity detection and explaining the sources of the detected ambiguities in order to improve natural language specifications and educate software analysts



An experiment with practitioners for evaluating the adequacy and feasibility of an existing software product line design method in order to prepare software product lines for likely future adaptation needs



A method for developing scenarios at multiple abstractions levels and check their consistency in order to specify complex software-intensive systems



An industrial evaluation based on benchmarks for comparing and assessing the suitability of two requirements prioritization techniques





A method for reasoning about likely sources of uncertainty in dynamically adaptive systems in order to apply the right adaptation strategies



A case study for collecting lessons learned from integrating Specification Templates, Collaborative Workshops, and Peer Reviews in RE



A method for visualizing how cyber-attacks are performed in an architectural context in order to closely intertwine requirements and architecture in the development of secure software



An experiment with students on the effectiveness of three creativity enhancement techniques to be used during requirements elicitation



A method for semi-automatically recovering traces in natural language specifications in order to be compliant with industrial standards



A case study for validating a multi-level approach for planning and managing variability and reuse across independent product ranges in a product family



A method for using low-effort ad-hoc videos as a concrete representation of early requirements in order to avoid misunderstandings in the early phases of a project



A method for building domain ontologies suitable to guide requirements elicitation in order to reconcile gaps in the knowledge and common understanding among stakeholders



An interview-based study for explaining the causes of an unsatisfactory RE process in a company in order to identify improvement points



An analysis on the integration of non-functional requirements into model-driven development processes in order to include this type of requirements into such processes



A method for systematically and repeatedly exchanging requirements between manufacturers and suppliers.



A method for formally representing requirements in order to facilitate their analysis and serve as basis for the testing process



A multi-case study on agile prioritization and business value delivery in order to empirically corroborate or contradict some common assumptions on agile practices



A process for creating traceability links between safety requirements, safety taxonomies, and safety risks in order to assure and recertify legacy safety-critical systems



A method for assessing the completeness of specification documents in order to avoid subjectiveness in such completeness assessment



An experience report on the value provided by requirements traceability in a commercial engineering company and a discussion of success factors



An experience report on the development of a simulation tool for the communication along requirements modelling.



An experience report on modeling a safety critical domain using a formal method in order to better understand its adequacy for domain engineering





A method for structuring a system so that critical requirements are localized in reliable subsets of its components in order to guarantee system's dependability largely by construction



A document-driven study for refining, assessing and deriving lessons learned of a set of templates for requirements written in natural language



A method for specifying confidentiality requirements in service level agreements in order to provide proof of being in control of outsourced IT assets



A method for capturing and reusing patterns of knowledge on non-functional requirements in order to properly manage the large body of knowledge in this field



A method for using integer constraint programming to specify product line constraints in order to facilitate the configuration of a product



A method for eliciting business goals and linking them to quality requirements of the system in order to allow software architects to understand the business goals of the system



A discussion on the need of future research on operationalizing requirements as runtime entities that can be reasoned over in order to support self-adaptation decisions

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An experience report on the application of a requirements framework developed after a root cause analysis in order to enhance customer partnerships in an IT company

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An experiment with students on investigating if human analysts make the right decisions when reviewing requirements traceability matrices generated by automated techniques

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A method for generating requirements traceability matrices considering the unique properties of requirements, e.g. small datasets

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A method for grading the implementation of use cases, features and requirements from a usability perspective in order to determine if a product meets its usability requirements

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A modeling language for specifying the system and finding criteria to compare candidate solutions at the early phases of requirements engineering

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A method for allowing end-users to document their needs in situ using their mobile devices in order to support end-user involvement in requirements elicitation



An online survey with practitioners on understanding what requirements elicitation and representation practices and techniques do not work well in China



A case study on understanding the effects of system architectures on RE decisions, the characteristics of such decisions and their impact on development activities



An experience report on the lessons learned from two projects about the transition from classical development process into agile development



A method for classifying ambiguities in natural language requirements and inform the analyst of the potentially dangerous cases in order to prompt further elicitation



A multi-case study for a commitment analysis method that can be used to obtain requirements from policy documents in order to validate it



A vision for proposing the exploration and transfer from other disciplines of creative problem solving practices in order to frame RE as a creative problem solving process



A case study on the application of a requirements negotiation and handover process in order to study its advantages with respect to requirements volatility and requirements understanding.



A method for incorporating goals that are able to adapt along time into requirement models, which embed adaptation countermeasures that are triggered when goals are violated



A method for selecting the strategic release plan that is most robust against assumed changes in resource allocation and availability



A formal framework for expressing optional and preferred requirements and associated techniques to search for design alternatives that best satisfy the given preferences.



An experience report on the use of a requirements modeling language that relate informal operational concepts with formal simulation models in order to provide reasoning capabilities to such operational concepts



A case study for identifying success factors and challenges involved in persuading review teams to document inspections in order to improve defect discovering



A method for extending automated analysis of natural language use cases to any other language in order to aggregate multilingual use cases in multi-national projects



An experiment with students on manually recovering trace links between requirements and code in order to identify where requirements are implemented



A method for identifying single- and multi-word terms that have a particular significance in a given domain in order to characterize the most salient features of the document in which they appear



An experiment with students for assessing a given constraint definition technique in order to improve the correctness, efficiency and user satisfaction when using meta-CASE tools.



An experiment with students on the inclusion of screen mockups in use cases in order to improve the understandability of functional requirements with no significant impact on effort.



A case study for characterizing natural language processing techniques and compare their support in detecting equivalent requirements.



A method for analyzing product descriptions from publicly available online specifications in order to model and recommend product features for a given domain



A method for generating a probabilistic model from a set of requirements in order to verify system requirements at runtime



A method for recovering a feature model from the existing software product line in order to reduce modeling effort



A method for performing semi-automated checking of combined natural language and semi-formal requirements models in order to ensure their consistency, completeness and correctness



A solution for automatically linking bug reports and committed changes in order to recover missing links



A method for prioritizing requirements considering several requirements characteristics, such as stakeholder preferences, technical constraints, implementation costs and user perceived value



A method for supporting use-case analysis that combines exemplary scenarios and general logical rules in order to allow gradually shifting from examples to the final system specification.



A case study for finding out whether a restricted English grammar can be applied in the automotive context in order to support automatic consistency checking



An industrial study based on questionnaires and interviews on the current industry needs concerning methodological support for requirements engineering in the embedded systems domain



An experiment with students on a method to support creativity in requirements engineering in order to get evidence about its creativity enhancement potential



A study based on experiments with students and a case study on the possible benefits of considering existing services and their alignment with requirements at a very early stage in order to exploit the desired benefits of reuse in service-oriented architectures



A case study on a requirements engineering improvement project consisting of a set of techniques applied to solve a handful of previously identified RE-related problems



A method for identifying security-relevant requirements integrated in a workflow of requirements analysis in order to increase security awareness within the software development process



A method for analysing requirements on e-services from the service consumer's perspective in order to make them fit smoothly into the service consumers' business processes



A case study for finding out which concepts of agile prioritization are shared in practice and in literature and how they are used to provide guidance for prioritization



A document-driven study with practitioners and researchers for investigating if use cases are as effective as task descriptions with respect to completeness, correctness and understandability of emerging requirements



An experience report on the use of tools and techniques for systematic elicitation, analysis and documentation of sustainability requirements in order to minimize negative environmental impact of the software under construction



A method for identifying groups of similarly optimal solutions in order to support multi-objective decisions problems



A method for defining efficiently trace links among business application artifacts in order to decrease the developer's workload for setting trace links



An interview-based study with practitioners on communication gaps in large-scale industrial RE revealing scale, temporal aspects, common views, and decision structures as main factors that affect the requirements communication.



A method for developing specifications in quick iterations of analyzing and refining a formal specification in order to facilitate rapid evolution of specifications of system features.



A solution for quantifying the consequence of stopping RE too early in order to avoid avoidable scope creep.



A method for negotiating requirements induced by the selections of off-the-shelf components in order to prevent a selection of unsuited or inappropriate components



An experience report on the state of the practice of requirements engineering in the nuclear energy domain in Finland



A method for simplifying overly complicated requirements in order to identify specification problems



A method for semi-automatic extraction of feature models from natural language specifications in order to support requirements reuse.



A multi-case study on prioritization of quality requirements in 11 companies in order to help future research on quality requirements to focus investigations on industry-relevant issues



An online-survey on factors that prevent business analysts from applying their requirements analysis knowledge in practice.



A method for analyzing cross-references within legal regulations in order to address conflicting requirements.





A solution for enabling citizens to report problems with or making suggestions for a software system by smartphone in order to identify new requirements.



A case study on the use of a classification of requirements change sources (e.g., market, organization, specification) in order to support change management, improve understanding and risk visibility.



A case study on the inability of students to assess whether requirements meet their corresponding legal obligations in order to motivate the need for domain experts and the potential utility of legal requirements metrics.



A solution for extracting logical structures (e.g., use cases, business rules or functional requirements) from rich-text documents written in general-purpose editors, such as MS Word in order to enable advanced requirements management features.



A multi-case study on assisted requirements tracing, a process in which an analyst validates candidate traces produced by an automated requirements tracing tool.



An experience report on the efforts to identify and monitor requirements uncertainty at Rolls-Royce in order to reduce the risk of late rework.



A method for simulating quantitative goal models in order to estimate the levels of goal satisfaction contributed by alternative system designs and optimize the system design.



A discussion on applying agile insights to requirements engineering activities in order to optimize allocation of resources to RE activities



A discussion and solution for examining organizational structures for power relationships in order to support decision-making processes.



A method for risk assessment in context of security requirements in order to guide the security argumentation in identifying rebuttals and mitigations for security requirements satisfaction.



A method for analysing requirements for embedded systems in order to separate relevant from irrelevant context elements.



An experience report on applying component-bus-system-properties in mobile applications in order to refine software requirements to software architectures.



A method for relaxing quality or functional requirements that are not crucial to the survival of a web system in order to increase the availability of a specific set of crucial services.



A method for eliciting requirements for context-adaptive systems based on observing anonymous users in order to increase the representativeness of the requirements.



A case study on roles and communication structures in a software team in order to investigate potential improvements of collaborations driven by requirements.



A method for automatically constructing models in order to predict which feature requests are most likely to fail due to insufficient or inadequate upfront analysis.



An experience report on using traditional requirements engineering techniques, formal methods, and visual narratives to disambiguate natural language safety requirements of industrial standards.



A method for finding desirable design solutions as the requirements change by reusing parts of old solutions in order to minimize the effort required to implement new solutions.

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A discussion on the joint usage of i\* goal models with other modeling frameworks in order to combine the advantages of goal-oriented RE with other paradigms

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A discussion of the concepts of tracing across multiple disciplines in order to illustrate how existing practices in requirements tracing could be leveraged.

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An action research study on roadmapping problems of two software product companies in order to shift the focus of roadmapping from prioritization of software features to analysis and prioritization of customers' processes

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A set of four experiments with students on the impact of System Sequence Diagrams and System Operation Contracts in order to assess the quality of the system domain model

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A method for generating a set of obstacle conditions corresponding to exceptional conditions that may obstruct system goals in order to detect missing requirements.

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A method for reasoning with partial models that capture uncertainty coming from multiple open choices in early specification stages in order to support modeling when requirements are still to be clarified



A method for automating the construction of traceability links for architectural tactics in order to support software maintenance and preserve architectural qualities



A method for transforming security policies expressed in natural language to a formal, processable form in order to detect inconsistencies in access control policies



A method for conducting failure analysis of systems that consist of several interacting component in order to integrate FMEA and system modelling.



An experience report on challenges and potential solutions of a supplier company with respect to tender processes.



A template for systematically deriving requirements elicitation instructions in Application Engineering processes in order to elicit requirements more effectively



A literature study on understanding the strengths and weaknesses of service description methods in order to allow developers selecting an appropriate description method that fits best their services



A case study on planning the releases of an evolving software solution in the presence of low-quality input requirement in order to reduce release planning effort and increase decision-making flexibility



A multi-case study on the use of goal-oriented requirements engineering techniques to improve traceability among enterprise architectures and business goals



A study with practitioners, researchers and students based on an experiment and interviews for understanding in which context do common traceability visualization techniques fit better and what information to visualize



A set of reusable queries for implementing a blueprint for traceability in safety-critical systems in order to comply with full life-cycle traceability as required by certification and regulatory agencies



A modeling language for representing and analysing requirements for Self-Adaptive Systems in order to make them readable by non-engineering stakeholders



A method for assessing the impact of changes in one requirement into other requirements in order to analyze the impact of requirement volatility on a project plan



A literature study on the meaning of the word "creativity" in Social Sciences and Requirements Engineering in order to understand which kinds of creativity are relevant to a project and which creativity tools to use



A case study on the awareness and handling of non-functional requirements among software architects, and their effect on IT project success



An interview-based study with practitioners on how functional and non-functional requirement mismatches are handled in Open Source Software adoption projects



A case study on a failed governmental IT project in order to understand the causes of failure from a requirements perspective





A method for aligning and reconciling requirements from multiple jurisdictions (municipalities, provinces, nations) in order to reduce the number of requirements a company must comply with.



A method for individual users to express privacy preferences, which are then used to reason about privacy for each user in different contexts.



An experience report on two requirements reuse strategies applied in one company in order to compare savings in reduced effort by reusing common requirements.



A solution for monitoring requirements in software systems by maintaining an instance of a state machine for each requirement in order to enable runtime monitoring and compensation capabilities



A field study on 62 applications of the Software Product Management Maturity Matrix that enables product managers to benchmark their organization in order to suggest improvements of the matrix.





A discussion of Requirements Composition Tables (RCTs), which structure an application's functionality by core features and crosscutting concerns in order to explain this concept to practitioners and discuss its benefits



A solution for comparing requirement sentences with domain-related documents in order to identify ambiguities in natural language requirements specifications.



A solution for automatic detection of speculative language use in natural language requirements in order to identify and uncover uncertainty in requirements.



A method for modeling regulations with a particular requirement specification language in order to help getting a more precise understanding of who complies with what.



An experience report on categorizing requirements in large systems engineering projects in order to present practical issues with requirements categorization



A method for detecting and classifying clarification events in online requirement discussions in order to highlight risks related to shared understanding.



A method for relating security-relevant assets to requirements and objectives of an attacker in order to analyze system security in different situations and to enable a set of countermeasures to mitigate security threats.



A study based on an online-survey on how product management practitioners understand the term product management in order to evolve product management frameworks and develop necessary skill sets for education of product managers.



A case study on the selection of the most appropriate value-based requirements prioritization framework given the requirements of a particular company



A method for quantitatively analyzing contribution relationship measures in goal models in order to support informed decisions about different solutions to requirements problems.



An experiments with students for understanding when and why humans make correct and incorrect decisions during tracing tasks with the support of a trace matrix that visualizes progress



A method for scenario-based specifications of component interactions in order to find inconsistencies between specifications of many variants in product lines



An interview-based study with practitioners on how software architects deal with non-functional requirements in order to increase knowledge about the state of the practice.



A solution for mining "requires" or "excludes" constraints in the construction of feature models.



A solution for automatically detecting outdated requirements based on changes in the code in order to keep requirements specifications up-to-date



A method for managing and reducing requirements uncertainty by partial requirements models so that uncertainty can be made explicit and incrementally removed



An experience report on applying a visual requirements modeling language that mitigates some of the weaknesses of UML in describing requirements.



A method for predicting what areas of a proposed legal rule are most likely to evolve in order to allow engineers to begin building their software towards the more stable sections of the rule.



A solution for recommending trace links while creating or modifying traceable artifacts in order to avoid trace link creation towards the end of a project.



A discussion on view-based requirements specifications including challenges and research questions in order to better understand the particular information needs of downstream development roles.



A solution for extracting and ranking requirement candidates based on an analysis of web server logs in order to improve requirements elicitation and prioritization



A solution for identifying and resolving feature interactions at the level of requirements specifications in order to detect undesirable behavior earlier in the development life-cycle.



A modelling language for modelling the behavioural requirements of a software product line in order to ease the task of adding new features to a set of existing requirements.





A discussion on the state of the art in traceability, the grand challenge for traceability, and future directions for the field in order to increase the pervasiveness in industry.



A method for annotating goals and assessing obstacles with probability measures in order to increase requirements completeness.



A study based on review inspections and interviews with practitioners on the most critical and important quality criteria for natural language requirements specifications



An experiment for testing the hypothesis that adding a requirements analyst who is ignorant of the domain improves the effectiveness of the requirements elicitation team.



A solution for grouping generated trace link candidates in high-quality and low-quality clusters in order to improve the accuracy of automatic trace link recovery tools.



An experience report on how the use of RE methods in DNA nanotechnology contributes to make DNA nanotechnology more productive, predictable, and safe.



A multi-case study on how frequently do some classes of requirements appear in specifications for web-based enterprise systems



An interview-based study with practitioners for understanding the adjustment of requirement management practices after the adoption of open source software in order to facilitate open innovation



An experiment with students for assessing the effect of real-time machine translation on multilingual terms in order to leverage communication power in globally-distributed, multilingual project meetings



A set of two experiments with students and practitioners for investigating whether the granularity and cognitive support of prioritization techniques affect the judgement of product features as essential



A data-driven study on analysing the data collected via data mining from a commercial game over a three-year period in order to provide recommendations for future development.



A method for supporting adaptation to non-functional manifestations of uncertainty in order to optimize the system's ability to meet its non-functional requirements



A method for finding the root causes of the non-realizability of a scenario-based system specification in order to detect conflicts in the specification



A case study on the impact of issue report misclassification (between feature and bug) in order to improve bug prediction



A multi-case study on how information flows between different human roles in software projects with contrasting distributions of domain knowledge and different communication structures.



A method for synthesising response time requirements of component services in order to guarantee the global response time requirement of a service composition



A framework for supporting the selective disclosure of personal information according to context information (time, location, ...) gathered at runtime in order to continuously satisfy privacy requirements



An experiment with students to understand how requirements analysts seek and gather information when linking requirements to other software artifacts



A method for analysing large sets of user feedback in order to extract new/changed requirements for next versions



A method for automatically deriving a machine specification satisfying a set of goals in a domain in order to reducing requirement modeling effort



A method for automatically extracting a feature model from publicly available natural language product descriptions in order to speed up such feature model extraction process



A method for transforming an under-specified visual design mockup drawn by the designer to an accurate and flexible web page with virtually no manual effort



A method for recovering traceability links between software artifacts that can be configured at runtime in order to optimize trace quality





A technique for both analyzing specifications of a product line to ensure that it is realizable and automatically synthesizing software components that show which sequences of actions the system can do to implement the specification



A study based on practitioner interviews and project data to create a framework to assess requirement-ambiguity risk in order to understand the relationship between requirement ambiguity and project success



A case study for evaluating the suitability of a new software release planning (SRP) process in order to improve and customize SRP in practice.



A method for identifying relevant groups of stakeholders in order to to enable facilitated decision-making and handling of requirements



A case study on understanding software product management challenges in order to understand how the evolving management style has affected the way product requirements are managed



A case study for analysing the emergence of mutual and shared understanding in the written communication of a multidisciplinary team in order to support effective collaboration

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An interview-based study with practitioners for understanding what traceability usage scenarios are most relevant for practitioners in order to provide a better traceability support.

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A method for grouping similar requirements in order to ease and allow a proper understanding of a requirements document.

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A method for selecting a regulatory compliance solution that best suits the stakeholder preferences.

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A literature study for understanding how the distance between RE and other development activities affect coordination and alignment to meet customer needs

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A case study for understanding the challenges of use case and requirements analysis in a low-tech rural environment

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A method for automatically finding ambiguities in RE documents in order to avoid the need for manual checks

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A method for architecting systems that contain requirements with consequences over the software architecture in order to ensure the architecture meets the requirements



A document-driven study for analysing RE-related job advertisements in order to determine how practitioners perceive and staff requirements engineers.



An experiment with students for comparing two requirements elicitation approaches when instantiating a Software Product Line (SPL) in order to understand which approach is more suitable for eliciting requirements when using SPLs.



A method for eliciting and modeling requirements for motion-based games for physiotherapy in order to guide the patients in performing the right movements for their rehabilitation



A method for supporting decision making for self adaptive systems in order to deal with uncertainty at runtime



A method for modelling i\* elements in UML in order to enable the usage of existing UML tools for i\*



A method for gathering feedback before a user has had experience with a software system in order to reduce the mismatch between actual and predicted user satisfaction



An interview-based study with practitioners for understanding how software architects cope with quality requirements in the context of large software system projects



A method for expressing legal requirements in order to overcome significant challenges in managing the many laws that govern their systems in a multi-jurisdictional environment



An interview-based study with practitioners on requirements traceability across organizational boundaries in order to identify current needs and challenges.



A case study for analyzing whether requirements with related information spread over many sections of many documents can be automatically classified



A case study for understanding the root causes of failed software projects in order to identify risk areas and provide practical guidance to practitioners



A case study on requirements brainstorming sessions considering knowledge of the domain as the factor to be measured in order to assess the effectiveness of idea generation



A method for identifying unstated assumptions in composite service-oriented applications in order to decrease the risk of unexpected behavior



A literature survey on requirements elicitation techniques and a roadmap of research in order to improve the elicitation of tacit knowledge



A method for predicting integration bugs based on network measures calculated over requirements dependency networks



An interview-based study on requirements elicitation techniques used by cloud providers in order to clarify challenges related to requirements elicitation posed by the cloud paradigm



A method for refactoring new and inconsistent terminology in requirements in order to enhance the practicality of automated tracing tools.



An experience report on the development of three generations of a product in order to assess the positive effects of well-written and well-reviewed requirements on the quality of the final product



A method for designing RE visual notations based on large groups of novices instead of small groups of experts in order to increase novice's ability to interpret RE notations correctly.



A solution for formally checking incomplete high-level specifications against formally specified requirements in order to integrate formal verification with agile approaches.



A method for automatic extraction of glossary terms from natural language requirements



A case study on feature interactions in an automotive software system in order to assess the extent, awareness, and importance of interactions between features



A solution for leveraging a knowledge base of domain concepts and their relationships for fully automated creation of traceability links in order to increase precision and recall



A method for systematically inspecting requirements specifications in order to increase their quality



A data-driven study on user feedback in app stores investigating how and when users provide feedback, the content of that feedback, and the impact of the feedback on the user community.



An experience report on the requirements engineering process for a national Police Force Crime Records Management System in order to present key challenges



A method for analyzing the structured relationships between requirements in order to validate requirements for completeness, correctness, and consistency.



A method for extracting a set of independent components from requirements descriptions in goal models in order to help analyzing the impact of requirements changes in the source code



A method for eliciting requirements for new telemedicine applications in a collaborative setting of time-constrained medical practitioners and requirements engineers in order to ensure compliance with medical protocols



A method for translating IT regulations into a legal requirements coverage model used to make coverage assertions about existing or planned IT systems in order to help developers identifying relevant legal requirements



A method for decomposing and structuring the behavioural requirements of a feature based on modes of operation (e.g., Active, Inactive, Failed) in order to provide a generic behavioural interface for features.



A study based on an online-survey on the ability of software engineers to understand the impact of cross-references in legal regulation texts over their software systems.



An experience report on the use of domain analysis to characterize current practice of applying requirement-based test generation at one industry partner in order to enhance the reuse of test artifacts across different products.



A solution for generating trace links between textual requirements artifacts based on machine learning in order to improve automatic link recovery techniques.





An experience report on factors that affect when having solution information in requirements is sensible and when it should be avoided in order to increase the understanding of practitioners.



An experience report on the integration of software architecting and decision-making methods in order to select a common service oriented architecture tool that could satisfy the needs of different business units.



A method for using defect taxonomies in order to improve requirements reviews and testing.



A method for metric-based prediction of requirements that are likely to evolve in order to narrow the scope of change analysis to a small set of requirements.



A solution for automatically mapping newly defined system requirements to corresponding system components in order to prevent requirements inconsistencies and help identify further necessary requirements.



A method for mapping natural language policy requirements to a formal representation in order to reason about conflicting requirements within a single policy and among multiple policies in a data supply chain.



A discussion on the major challenges of reviewing requirements specifications in industry in order to align research activities to add more value for the software industry.



A literature review on visual requirements analytics, a field that aims at increased interactivity of requirements visualization in order to lead to actionable decisions



A multi-case study on the readability of policy documents for requirements engineers and assessing if automated text mining can indicate whether a policy document contains requirements



An interview-based study with practitioners on the quality and suitability of a project's traceability strategy in order to identify common problems across traceability strategies and their possible causes.



A data-driven study on requirements artifacts and processes in open source systems, where classical software engineering is not employed in order to identify risks of development failures and consequences for system quality.



A project-based study with students on a semi-automatic tool to capture implicit traceability links from requirements to code in order to evaluate the feasibility and practicability.



A case study for validating a tool that automatically checks the conformance of requirements to a given template in order to reduce ambiguity in natural language requirements



An experiment with students for investigating the relationship between time pressure and efficiency in test case development and requirement review



A method for self-adapting the architecture of a software system to the changing requirements and contexts at runtime in order to improve effectiveness and flexibility of adaptation





A method for extracting a model showing traces between software artifacts and analysing this model to identify areas of traceability failure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An online survey with practitioners and academics on how users and developers from various geographical locations perceive privacy and which concrete measures would mitigate their privacy concerns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A method for extracting and refining privacy requirements for mobile applications from raw data gathered through empirical studies involving end users	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A method for describing uncertainty about the impact of design alternatives on stakeholders' goals and calculate the consequences of such uncertainty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An experiment with students on the effects of present customer desires as requirements or as ideas on design creativity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A method for deriving structured requirements models in the form of process diagrams and ontologies from textual use case requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



A case study on the use of issue tickets generated by stakeholders' requests to track requirements evolution for a large-scale system



A framework for allowing requirements engineers and non-technical stakeholders to perform model checking during elicitation, analysis and verification of system requirements



An experience report for presenting and comparing examples of various approaches to teaching RE in order to inspire instructors to seek additional learning approaches.



A online survey with researchers and academics for identifying benefits, domain areas, and challenges for social adaptation.



A method for systematically managing obstacles and refining compliance goals in order to support the elaboration of compliance requirements.



A method for detecting inconsistencies in temporal constraints in order to verify the consistency of temporal requirements



A model for capturing and representing traceability in order to provide safety evidence on safety-critical systems



A method for comparing the results of multiple priority-based decision heuristics in order to identify the best heuristics for deciding which requirements should be refined/elaborated first.



A method for weaving the feedback from the runtime system into requirements documents in order to keep development time and runtime requirement models consistent



An experiment with students for exploring the effect of collaborative interactions between clients and analysts in the process of requirements validation.



An experience report for identifying understandability issues of formal specifications and providing writing style guidelines in order to make formal specifications understandable.



A method for acquiring, modeling and analyzing regulatory requirements in order to conform to regulations on safety-critical system.



An interview-based study for understanding current practices of user-developer communication in IT projects in order to identify issues and enhance user-developer communication.



An online survey with practitioners for identifying causal relationships between requirements elicitation issues and project performance in order to strengthen the execution of RE activities and reduce risk on project performance



An interview-based study with practitioners for understanding how the game industry applies RE in practice



A method for identifying unwanted interaction between requirements in order to address the diverse interests of different stakeholders in a coherent way



A case study for comparing different approaches to categorization of natural language requirements in order to understand the best way to achieve effective communication and prioritization



A method for transforming requirements for service-based systems to QoS-aware choreography specification in order to deliver more adaptive software systems



A method for measuring and improving the completeness of natural language requirements with respect to the input documents in order to include all the relevant information from these documents



A literature study for identifying and categorizing research in self-adaptive systems requirements modeling and analysis



A method for resolving exceptional conditions that may obstruct the behavioral goals of the target system in order to progress towards a more complete model of stakeholder goals.



An experience report on the adoption of a persona-centric requirements framework in order to show its ability to quantify user experience.



A case study on collaboration networks between small and medium-sized software companies in order to investigate the impact to software product management and requirements engineering practices.



A case study on a protocol for deriving functional safety requirements from Fault Tree Analysis results in order to increase the safety of critical systems.





A case study on requirements engineering in open commercial development models describing the flow of product requirements information through the ecosystem



A method for specifying and validating feature-oriented requirement models in order to avoid behavioral inconsistencies between features.



A method for finding suitable trade-offs and priorities when complying with multiple regulations while at the same time trying to meet business objectives.



A solution for automatically filtering, aggregating, and analyzing user reviews to systematically analyze user opinions about single features



A case study on the transformation of a set of natural language functional requirements to a semi-formal pattern notation in order to investigate the applicability of this process in the automotive domain.



A method for representing requirements and conflicts as a jigsaw puzzle in stakeholder meetings in order to improve commitment of stakeholders in co-authoring of requirements and co-responsibility in conflict handling



A solution for automatically detecting cross references in legal documents and linking them to the target provisions in order to improve the elaboration of compliance requirements.



A method for requirements discovery for health care systems in order to increase the acceptance by the target user community.



A method for selecting the most appropriate security requirements pattern in order to decrease the time spent in the requirements elicitation process and improve the quality of the product.



An interview-based study on how game developers reason about gameplay requirements and handle them in their projects in order to improve the elicitation and validation of gameplay requirements.





A method for requirements elicitation based on interactions of autonomous parties and the participants' social relationships in order to improve the requirements engineering for sociotechnical systems



An experience report on the use of a method for discovering customer requirements to configure an off-the-shelf software package.



A solution for automatically identifying security-relevant sentences in natural language requirements and translating them into functional security requirements in order to strengthen the overall security of the system.



A method for estimating the size of an application previous to its requirements specification by using the application language itself, captured by a lexicon in order to get estimations earlier.



A solution for extracting familiar ideas from the documented requirements and stakeholders' comments and automatically obtaining unfamiliar idea combinations in order to generate innovative requirements.



An interview-based study on how practitioners understand, capture, and use business rules in order to describe constraints in a domain.



A case study on the requirement elicitation for a recommender system that supports therapists in selecting motion-based video games to treat patients with brain injuries.



A method for eliciting quality-impact relationships and using them to specify quality requirements in order to achieve good-enough quality.



A method for visualizing how IT impacts are linked to business value, and how much and when value is realised in order to evaluate IT business value on a company level.



An experience report on a system provider/sub-contractor collaboration centered around design-level requirements in order to report lessons learned regarding requirements representations, requirements tools, and cooperation process.



A solution for combining adaptation decisions based on goals with past experiences of successful adaptations in order to improve adaptation effectiveness and overall system quality.



A method for analyzing goal satisfaction resulting from resolved uncertainty in order to support early requirements decision-making in the presence of uncertainty.



A solution for exploiting the information contained in previously defined trace links in order to facilitate the creation and ongoing maintenance of trace links as the requirements evolve.



A method for assessing the quality of RE processes and artifacts in a company in order to identify issues and potential improvements



An experience report on using goal modelling to incorporate sustainability into the procurement system of a large multinational energy company in order to evaluate the suitability of the technique for such a purpose



A method for detecting vulnerabilities in requirements of long-living software systems based on reported security incidents in order to keep long-living systems "up-to-date" with respect to security.



An experience report on applying a combination of RE methods to elicit performance requirements in an existing system from the process automation domain in order to improve performance testing.



A study based on experiments with crowd workers on extracting requirements from natural language text sources by untrained workers in order to evaluate the cost and quality of crowdsourcing RE tasks.



A data-driven study on the use of a requirements inspection methodology in more than 140 projects in order to discover correlations between requirements specification quality and project costs or product quality.



A method for identifying ambiguity in legal texts in order to prevent software engineers from implementing software that does not comply with the regulations.



A modeling language for defining non-functional requirements (NFRs) based on the fulfillment of other requirements in order to specify unambiguous, de-idealized, and measurable NFRs.



A method for capturing the uncertainty of feature evolution in feature models in order to decide which features to implement next.



A method for locating where software should be refactored and which refactorings should be applied in order to fulfil unsatisfied stakeholder goals.



A solution for writing or speaking trace queries in natural language in order to lower the barrier for utilizing trace data.



An experience report on representing and reusing product knowledge for product customization in order to identify requirements for product variants.



A solution for automatic extraction and modeling of quality concerns from textual documents such as requirements, feature requests, and online forums in order to elicit quality requirements



A case study on the use of a tool for specifying requirements based on two types of knowledge-reuse artifacts in order to evaluate the effects on requirements ambiguity and inconsistency.



An experience report on eliciting user requirements with a non-standard user population: visually impaired users.



A solution for identifying violations of security requirements that may be caused by topological changes of the environment and selecting security controls that prevent such violations.



An online survey on the ability of laypersons, technical professionals, and legal experts to judge the similarity between legal coverage conditions and requirements.



An experiment with students for determining whether practicing mindfulness for four weeks enhances conceptual modelling skills in order to improve professional performance of software engineers



An interview-based study with practitioners for understanding how software architects working on large, distributed projects are involved in engineering quality requirements.



An online survey with practitioners and academics for validating the acceptance and impact of an approach based on artifacts and scenarios







A case study for validating a technique for clustering keywords extracted from natural-language requirements in order to support the automatic construction of project glossaries



A case study for including quality requirements in a software release planning technique in order to demonstrate the benefits in terms of release time and product scope



An experience report on the use of a lean methodology to identify security requirements in order to integrate them in the software production cycle



An experiment with students for assessing a technique that automatically suggests appropriate security requirements templates implied by existing functional requirements



A method for the efficient model-based verification of product line requirements in order to detect and correct requirement errors early.



A method for automatically extracting goal and use case models from natural language requirements documents in order to support further analysis of the extracted models.





A case study for identifying metrics that evaluate feature models in order to quantify the success of feature models in practice.



A method for transforming informal requirements into formal ones in order to reduce requirements defects.



An industrial study using interviews and surveys for investigating the design of Digital Addiction labels in order to meet ethical and professional requirements.



A workshop-based industrial study on the usability of user stories in order to embed human values in the requirements engineering process.



A set of metrics for assessing and quantifying requirement relations in agile development in order to estimate implementation risk of requirements.



A case study on the customer challenges and demands on requirements engineering processes in order to bring the customer perspective into outsourced projects.



An industrial study using experiments and focus groups for understanding whether the use of catalogs of threats and security controls affects the actual and perceived effectiveness of a security risk assessment method.



A literature study for identifying and categorizing prioritization criteria in order to customize prioritization criteria to a particular project situation.



A case study for evaluating a particular approach to release planning in order to reach the market as early as possible with a competitive level of quality.



A method for analyzing and enforcing security mechanisms on system requirements in order to precisely capture the impact of security in the system.



A method for integrating several types of contextual information into a diagrammatic representation in order to improve the validation of functional safety requirements.



An experiment with students for assessing an existing availability risk assessment method in order to improve its reliability.



A method for the mutual adjustment of conflicting requirements between business and IT perspectives in order to get seamless alignment between these two perspectives.



A method for modeling and reasoning about information quality at requirements level in order to avoid low-quality information for critical systems.



A method for semi-automatically translating natural language requirements into a formal language in order to validate natural language requirements



A method for consolidating behavioral requirements and functional design in order to avoid behavioral requirements of the system become outdated.



An interview-based study with practitioners for understanding how practitioners in various roles use requirements artifacts in order to support better requirements communication.



A method for integrating user feedback involving geographically dispersed stakeholders in order to facilitate forum-based requirements elicitation.



An experiment with practitioners and students on generating creative ideas and requirements in creativity workshops in order to evaluate the effectiveness of different creativity techniques.



A method for managing uncertainty about estimates of likelihoods of obstacles to goal satisfaction in order to facilitate risk-based methods for RE.



A method for analyzing feature life cycles in app stores in order to help app developers identify trends and find undiscovered requirements.



An experience report on practical realities an organization faces in attempting to reuse requirements, including a requirements reuse process, encountered problems, obtained results, and plans for future improvement of the process.



A solution for checking 14 quality criteria in user stories that user story writers should strive to conform to in order to turn raw user stories into higher-quality ones.



A method for analyzing privacy properties in service-oriented architectures based on a data flow model in order to reduce privacy and security risks when integrating third-party services.



A method for semi-automatically exposing whether the unanticipated behavior of the operational context can result in undesired system states.



A study based on an online-survey on how changes to security requirements affect analysts' risk perceptions in order to understand how the analysts perceive risks in composed systems.



A literature study for identifying dependent variables used in experimental requirements engineering research.



A model for monitoring the compliance of a System of Systems (SoS) with its requirements at runtime.



A data-driven study for comparing several probabilistic techniques to classify app reviews from app stores in order to assess their accuracy.



A document-driven study for understanding and classifying ambiguity occurring in customer-analyst interviews in order to improve the use of interviews during requirements elicitation.



A method for acquiring the knowledge of various stakeholders along multiple dimensions of problem space and design space in order to elicit the users' requirements in self-adaptive systems.



An interview-based study for identifying categories of probing questions in order to prompt business analysts to elicit architecturally significant functional requirements.



A solution for specifying preferences over goals through natural language statements in order to the comparison of alternatives during the specification process.



An interview-based study with practitioners on the flow of requirements in the process of automotive software development and strategies to refine requirements iteratively throughout their life-cycle.



A method for inferring the test status of requirements based on the test status of structurally related requirements in order to better assess the quality of the system.



A solution for determining the quality of trace links and detecting unacceptable deviations in order to support the systematic assessment of a project's traceability.

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An experience report on challenges in creating testable experience requirement for entertainment applications (e.g., games).

☐☐☐☐

A case study for investigating which changes requirements engineers perform on use cases over time and which of them are more problematic in difficulty or risk in order to understand the maintainability of use cases.

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A solution for calculating how likely a natural-language requirement statement is to be impacted by a change in order to automatically analyze how a change to one requirement impacts other ones.

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A method for eliciting a model of all operational states of a system in order to ease the specification of features based on these operational states.

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A method for capturing inconsistencies between stakeholders' goals and beliefs and resolving goal conflicts.

☐☐☐☐



A case study on prototyping in an agile RE project in order to examine the potential to solve the challenges of agile RE, especially the lack of documentation, the motivation for RE work, and poor quality communication.



A document-driven study in the industry on the use of passive voice and weak words in requirements showing that passive voice is almost never problematic.



An experiment with students and practitioners on the use of a mobile tool for model-based sketching of free-form diagrams allowing for the definition and reuse of diagramming notations on the fly in order to assess the usefulness of the tool.



A solution for automatically extracting and tracking non-functional requirements from the textual content of requirements specifications.



An experience report on a failed project in which the customer eventually decided to take over the development themselves in order to investigate requirements-related root causes for such decision.



A set of two empirical studies (online survey to practitioners and experiment with students) on the creation and use of software requirement specifications in companies and the impact of their quality in subsequent development activities.



A case study on the effectiveness of a particular method to visually represent requirements evolution histories.



A document-driven study on the differences between documented non-functional and functional requirements in industrial requirements specifications in order to assess how sharp this distinction is in practice.



An interview-based study on reusable probing questions used to gather information for architectural decision-making in order to equip business analysts with these questions.



A method to automatically revise goals that may be underspecified or partially wrong to resolve obstructions in a given domain.



A method to discover security requirements in continuously evolving threat landscapes which lead to new tacit knowledge that is embedded in or across a variety of security incidents.





An interview-based study to explore requirements engineering practitioners' perceptions and attitudes towards sustainability.



An experience report on teaching requirements engineering for undergraduate students.



A method for automatically identifying the impact of requirements changes to system design using SysML.



An experiment with students for analyzing different software engineering tasks that affect the tracing of the same requirement.



A specification language for modeling both rich configurations and expressive temporal properties in order to make formal verification of systems involving these properties.



A method for automatically decomposing on-the-fly formal specifications and verify them seamlessly in order to support industrial-scale applicability of formal verification techniques.



A method for runtime self-adaptation ensuring the satisfaction of multiple goals while simultaneously reaching optimality to an additional goal and achieving robustness to environmental disturbances.



A method for on-line analysis of formal specifications able to cope efficiently with the evolution of such specifications in order to support adoption of such techniques in industrial contexts.



A method for mining performance specifications from running systems that allow performance regression testing and performance monitoring.



A method for deciding the plan for the next software release considering the risk of different perceptions of value and different revenues associated with multiple (groups of) stakeholders.



A method for integrating goal-oriented requirements engineering and multi-criteria decision making for problem modeling and analysis.



A data-driven study on the performance of a set of information retrieval algorithms for computing traceability in issue tracking systems.



A case study on understanding how stakeholder influence and collaboration patterns evolve over time and how innovation and time-to-market evolve over the same period of time.



A multi-experiment with students for comparing the accuracy and performance of different query representation techniques in order to improve the ability to provide critical feedback to users making queries.



A method for searching certain classes of potential problems in business process models related to their incompleteness of the ambiguity of their labels.



A method for classifying automatically legal cross references across several provisions which refer to a single compliance requirement.



A case study on measuring the frequency of eight types of requirements defects (e.g., incompleteness) and refining them according to nine possible defect sources (e.g., wording).



A model for relating gamification, stakeholder engagement and RE performance in agile processes in order to increase stakeholder engagement adequately in each RE phase.



A data-driven study for uncovering detailed relations between requirements and design decisions and demonstrate the effectiveness of a particular documentation approach for decision-related knowledge.



A multi-instrument study (survey followed by interviews) with industry on their productivity and the quality of their working documents when using user stories.



A literature review on reported evidence on customer input during continuous deployment in software engineering, including potential benefits, challenges, methods, and tools.



A literature study on specific threats to validity in controlled experiments with student participants and on mitigation strategies for these threats.



A conceptual framework for integrating lean principles within design science research phases and outputs exemplified with the planning and execution of software and requirements engineering research projects



An experiment with students on comparing through eye tracking the way specifications are read depending on their presentation format and considering different role perspectives.



A case study for assessing the impact of a real legal change proposal on an existing specification model using model-based simulation techniques.



A process for putting together agile development, DevOps, and innovation management in order to embed technological innovations into the overall system.



A state of the art report on the status quo, challenges, findings and possible directions in RE for health data analytics.



A method for revising software requirements specifications (SRS) through inspection at two different levels of abstraction in order to assess the SRS quality.



A study based on interviews with practitioners and a literature review for building a body of knowledge for traceability in order to assist engineers how to implement traceability in a project.



An experience report on the process followed to elicit, classify, prioritize, and validate privacy requirements for a privacy platform involving public administration and citizens.



A case study for understanding how experts can elicit security demands from stakeholders of the application domain and derive security policy templates.



A training program for assisting requirement authors through a network of trained experts in the context of large projects with dozens of such authors.

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An ontology for describing properties of data and systems that allow to generate and manage privacy requirements in order to integrate the legal and engineering perspectives.

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An experience report on applying a tailored INCOSE requirements engineering process to the specificities of retrofittable subsea equipment systems.

☐☐☐☐

A multi-case study with practitioners on the lessons learned using a set of templates for requirements written in natural language during six years.

☐☐☐☐

A method for specifying changes in intentions over time and simulating such changes in order to make trade-off decisions about the evolution of requirements.

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An online survey on the ability of laypersons, technical professionals, and legal experts to judge the similarity between legal coverage conditions and requirements.

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An interview-based study with practitioners for identifying a set of cues appearing in linguistic expressions that typically lead to ambiguity in order to improve customer-analyst communication.



A study based on case studies and interviews with practitioners for identifying challenges involved in collaborative traceability management and how traceability can be used to enable collaboration.



A process for automatically discovering requirements knowledge from large sets of domain documents in order to assist organizations in entering new domains.



A framework for helping analysts in identifying system misuse cases using formal reasoning about social norms in order to avoid data breaches originating from such misuses.



A framework for specifying performance requirements based on sentence patterns in order to reduce their level of incompleteness.



A tool for connecting textual notes and video recording when holding requirements elicitation workshops supporting enhanced analysis in order to mitigate the scribe's overload.





A literature review on the existing approaches in goal-oriented RE in order to provide research directions in this area.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An experiment with students for validating that modeling separately the stakeholder viewpoints and then explicitly merging them leads to a richer domain understanding than constructing a single coherent requirements model.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An interview-based study with practitioners for knowing the current practices of presenting and manipulating artifacts in documentation tools in order to understand how well these tools support requirements engineers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An experiment with academics for exploring the impact of violating goal model layout guidelines onto the understandability of the requirements represented in such model.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A data-driven study for understanding the communication about software applications on Twitter and its relevance for RE and software evolution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





A method for eliciting security requirements related to the acquisition of information about the system by methods that deeply include non-technical means.



An interview-based study with practitioners on the current practices for writing, maintaining and linking requirements and acceptance test documentation in agile projects.



An analysis of the adequacy of different natural language processing techniques and machine learning features for identifying software feature requests in issue tracking systems.



A model for understanding the implications of privacy requirements vagueness in aligning company's privacy policies with their data practices in order to reduce privacy risks.



A literature review on the existing approaches in the visualization techniques available in RE.



A case study on generating and rating ideas from the crowd in order to understand how human personality and creative potential influence requirement acquisition from the crowd.



A method for automatically deriving conceptual data models from user stories written in natural language in order to create a holistic view of the requirements specification,



A method for enlarging traditional traceability approaches with information linking documents generated during traditional and agile methodologies in order to ease the transition to agile development.



A case study on the need for requirement change control policies and formal processes to coexist with informal requirement change management in globally distributed settings.



A taxonomy for classifying requirement errors and for guiding developers to find additional faults based on the type of usual human errors in order to avoid requirement engineers to make the same errors in the future.



A data-driven study for understanding the effect of size and layout flaws in the comprehension of several types of UML specification models.



An experiment with students for investigating reading patterns and learning styles of software requirement inspectors for in order to enhance inspection team outcome.

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A framework for supporting a systematic and comprehensive discovery of security goals for a system.

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Please, provide a brief explanation for your ratings, if possible. In case you couldn't respond comprehensively in the previous page, please either go back and revise your rating or ignore the summary and move on to the next page.

**Please provide a brief explanation for why you provided one of the highest ratings to the following piece of research.**

A method for automatically recovering software traceability links between various software artifacts based on topic modelling (requirements, design, code, bug reports, test cases)

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A set of two techniques for improving the quality of traces generated between regulatory standards and product level requirements

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A case study on evaluating a given technique for identifying and prioritising stakeholders in order to involve the right stakeholders in system analysis

An experience report on the development of a methodology and tools for the formalization and subsequent validation of specifications in a project for the public administration

A document-driven study on the relevancy of clones in industrial requirements specifications and of clone detection as a requirements quality assurance technique

A case study on the effects of a highly ambiguous requirements document on project success

A data-driven study on the importance of quality requirements throughout the system lifecycle

An interview-based study with practitioners for identifying key challenges in aligning requirements and verification processes in order to assure that the developed software product satisfies customer requirements

A tool for automating  
ambiguity detection and  
explaining the sources of the  
detected ambiguities in order  
to improve natural language  
specifications and educate  
software analysts

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An experiment with  
practitioners for evaluating the  
adequacy and feasibility of an  
existing software product line  
design method in order to  
prepare software product lines  
for likely future adaptation  
needs

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A method for developing  
scenarios at multiple  
abstractions levels and check  
their consistency in order to  
specify complex software-  
intensive systems

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An industrial evaluation based  
on benchmarks for comparing  
and assessing the suitability of  
two requirements prioritization  
techniques

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A method for reasoning about  
likely sources of uncertainty in  
dynamically adaptive systems  
in order to apply the right  
adaptation strategies

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A case study for collecting lessons learned from integrating Specification Templates, Collaborative Workshops, and Peer Reviews in RE

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A method for visualizing how cyber-attacks are performed in an architectural context in order to closely intertwine requirements and architecture in the development of secure software

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An experiment with students on the effectiveness of three creativity enhancement techniques to be used during requirements elicitation

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A method for semi-automatically recovering traces in natural language specifications in order to be compliant with industrial standards

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A case study for validating a multi-level approach for planning and managing variability and reuse across independent product ranges in a product family

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A method for using low-effort  
ad-hoc videos as a concrete  
representation of early  
requirements in order to avoid  
misunderstandings in the early  
phases of a project

A method for building domain  
ontologies suitable to guide  
requirements elicitation in  
order to reconcile gaps in the  
knowledge and common  
understanding among  
stakeholders

An interview-based study for  
explaining the causes of an  
unsatisfactory RE process in a  
company in order to identify  
improvement points

An analysis on the integration  
of non-functional requirements  
into model-driven development  
processes in order to include  
this type of requirements into  
such processes

A method for systematically  
and repeatedly exchanging  
requirements between  
manufacturers and suppliers.

A method for formally  
representing requirements in  
order to facilitate their analysis  
and serve as basis for the  
testing process

A multi-case study on agile prioritization and business value delivery in order to empirically corroborate or contradict some common assumptions on agile practices

A process for creating traceability links between safety requirements, safety taxonomies, and safety risks in order to assure and recertify legacy safety-critical systems

A method for assessing the completeness of specification documents in order to avoid subjectiveness in such completeness assessment

An experience report on the value provided by requirements traceability in a commercial engineering company and a discussion of success factors

An experience report on the development of a simulation tool for the communication along requirements modelling.

An experience report on modeling a safety critical domain using a formal method in order to better understand its adequacy for domain engineering

A method for structuring a system so that critical requirements are localized in reliable subsets of its components in order to guarantee system's dependability largely by construction

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A document-driven study for refining, assessing and deriving lessons learned of a set of templates for requirements written in natural language

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A method for specifying confidentiality requirements in service level agreements in order to provide proof of being in control of outsourced IT assets

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A method for capturing and reusing patterns of knowledge on non-functional requirements in order to properly manage the large body of knowledge in this field

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A method for using integer constraint programming to specify product line constraints in order to facilitate the configuration of a product

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A method for eliciting business goals and linking them to quality requirements of the system in order to allow software architects to understand the business goals of the system

A discussion on the need of future research on operationalizing requirements as runtime entities that can be reasoned over in order to support self-adaptation decisions

An experience report on the application of a requirements framework developed after a root cause analysis in order to enhance customer partnerships in an IT company

An experiment with students on investigating if human analysts make the right decisions when reviewing requirements traceability matrices generated by automated techniques

A method for generating requirements traceability matrices considering the unique properties of requirements, e.g. small datasets

A method for grading the implementation of use cases, features and requirements from a usability perspective in order to determine if a product meets its usability requirements

A modeling language for specifying the system and finding criteria to compare candidate solutions at the early phases of requirements engineering

A method for allowing end-users to document their needs in situ using their mobile devices in order to support end-user involvement in requirements elicitation

An online survey with practitioners on understanding what requirements elicitation and representation practices and techniques do not work well in China

A case study on understanding the effects of system architectures on RE decisions, the characteristics of such decisions and their impact on development activities

An experience report on the lessons learned from two projects about the transition from classical development process into agile development

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A method for classifying ambiguities in natural language requirements and inform the analyst of the potentially dangerous cases in order to prompt further elicitation

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A multi-case study for a commitment analysis method that can be used to obtain requirements from policy documents in order to validate it

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A vision for proposing the exploration and transfer from other disciplines of creative problem solving practices in order to frame RE as a creative problem solving process

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A case study on the application of a requirements negotiation and handover process in order to study its advantages with respect to requirements volatility and requirements understanding.

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A method for incorporating goals that are able to adapt along time into requirement models, which embed adaptation countermeasures that are triggered when goals are violated

A method for selecting the strategic release plan that is most robust against assumed changes in resource allocation and availability

A formal framework for expressing optional and preferred requirements and associated techniques to search for design alternatives that best satisfy the given preferences.

An experience report on the use of a requirements modeling language that relate informal operational concepts with formal simulation models in order to provide reasoning capabilities to such operational concepts

A case study for identifying success factors and challenges involved in persuading review teams to document inspections in order to improve defect discovering

A method for extending automated analysis of natural language use cases to any other language in order to aggregate multilingual use cases in multi-national projects

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An experiment with students on manually recovering trace links between requirements and code in order to identify where requirements are implemented

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A method for identifying single- and multi-word terms that have a particular significance in a given domain in order to characterize the most salient features of the document in which they appear

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An experiment with students for assessing a given constraint definition technique in order to improve the correctness, efficiency and user satisfaction when using meta-CASE tools.

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An experiment with students on the inclusion of screen mockups in use cases in order to improve the understandability of functional requirements with no significant impact on effort.

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A case study for characterizing natural language processing techniques and compare their support in detecting equivalent requirements.

A method for analyzing product descriptions from publicly available online specifications in order to model and recommend product features for a given domain

A method for generating a probabilistic model from a set of requirements in order to verify system requirements at runtime

A method for recovering a feature model from the existing software product line in order to reduce modeling effort

A method for performing semi-automated checking of combined natural language and semi-formal requirements models in order to ensure their consistency, completeness and correctness

A solution for automatically linking bug reports and committed changes in order to recover missing links

A method for prioritizing requirements considering several requirements characteristics, such as stakeholder preferences, technical constraints, implementation costs and user perceived value

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A method for supporting use-case analysis that combines exemplary scenarios and general logical rules in order to allow gradually shifting from examples to the final system specification.

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A case study for finding out whether a restricted English grammar can be applied in the automotive context in order to support automatic consistency checking

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An industrial study based on questionnaires and interviews on the current industry needs concerning methodological support for requirements engineering in the embedded systems domain

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An experiment with students on a method to support creativity in requirements engineering in order to get evidence about its creativity enhancement potential

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A study based on experiments with students and a case study on the possible benefits of considering existing services and their alignment with requirements at a very early stage in order to exploit the desired benefits of reuse in service-oriented architectures

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A case study on a requirements engineering improvement project consisting of a set of techniques applied to solve a handful of previously identified RE-related problems

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A method for identifying security-relevant requirements integrated in a workflow of requirements analysis in order to increase security awareness within the software development process

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A method for analysing requirements on e-services from the service consumer's perspective in order to make them fit smoothly into the service consumers' business processes

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A case study for finding out which concepts of agile prioritization are shared in practice and in literature and how they are used to provide guidance for prioritization

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A document-driven study with practitioners and researchers for investigating if use cases are as effective as task descriptions with respect to completeness, correctness and understandability of emerging requirements

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An experience report on the use of tools and techniques for systematic elicitation, analysis and documentation of sustainability requirements in order to minimize negative environmental impact of the software under construction

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A method for identifying groups of similarly optimal solutions in order to support multi-objective decisions problems

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A method for defining efficiently trace links among business application artifacts in order to decrease the developer's workload for setting trace links

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An interview-based study with practitioners on communication gaps in large-scale industrial RE revealing scale, temporal aspects, common views, and decision structures as main factors that affect the requirements communication.

A method for developing specifications in quick iterations of analyzing and refining a formal specification in order to facilitate rapid evolution of specifications of system features.

A solution for quantifying the consequence of stopping RE too early in order to avoid avoidable scope creep.

A method for negotiating requirements induced by the selections of off-the-shelf components in order to prevent a selection of unsuited or inappropriate components

An experience report on the state of the practice of requirements engineering in the nuclear energy domain in Finland

A method for simplifying overly complicated requirements in order to identify specification problems

A method for semi-automatic extraction of feature models from natural language specifications in order to support requirements reuse.

A multi-case study on prioritization of quality requirements in 11 companies in order to help future research on quality requirements to focus investigations on industry-relevant issues

An online-survey on factors that prevent business analysts from applying their requirements analysis knowledge in practice.

A method for analyzing cross-references within legal regulations in order to address conflicting requirements.

A solution for enabling citizens to report problems with or making suggestions for a software system by smartphone in order to identify new requirements.

A case study on the use of a classification of requirements change sources (e.g., market, organization, specification) in order to support change management, improve understanding and risk visibility.

A case study on the inability of students to assess whether requirements meet their corresponding legal obligations in order to motivate the need for domain experts and the potential utility of legal requirements metrics.

A solution for extracting logical structures (e.g., use cases, business rules or functional requirements) from rich-text documents written in general-purpose editors, such as MS Word in order to enable advanced requirements management features.

A multi-case study on assisted requirements tracing, a process in which an analyst validates candidate traces produced by an automated requirements tracing tool.

An experience report on the efforts to identify and monitor requirements uncertainty at Rolls-Royce in order to reduce the risk of late rework.

A method for simulating quantitative goal models in order to estimate the levels of goal satisfaction contributed by alternative system designs and optimize the system design.

A discussion on applying agile insights to requirements engineering activities in order to optimize allocation of resources to RE activities

A discussion and solution for examining organizational structures for power relationships in order to support decision-making processes.

A method for risk assessment in context of security requirements in order to guide the security argumentation in identifying rebuttals and mitigations for security requirements satisfaction.

A method for analysing requirements for embedded systems in order to separate relevant from irrelevant context elements.

An experience report on applying component-bus-system-properties in mobile applications in order to refine software requirements to software architectures.

A method for relaxing quality or functional requirements that are not crucial to the survival of a web system in order to increase the availability of a specific set of crucial services.



A method for eliciting requirements for context-adaptive systems based on observing anonymous users in \_\_\_\_\_ order to increase the representativeness of the requirements.

A case study on roles and communication structures in a software team in order to investigate potential \_\_\_\_\_ improvements of collaborations driven by requirements.

A method for automatically constructing models in order to predict which feature requests are most likely to fail due to \_\_\_\_\_ insufficient or inadequate upfront analysis.

An experience report on using traditional requirements engineering techniques, formal methods, and visual narratives \_\_\_\_\_ to disambiguate natural language safety requirements of industrial standards.

A method for finding desirable design solutions as the requirements change by reusing parts of old solutions in \_\_\_\_\_ order to minimize the effort required to implement new solutions.

A discussion on the joint usage of i\* goal models with other modeling frameworks in order to combine the advantages of goal-oriented RE with other paradigms

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A discussion of the concepts of tracing across multiple disciplines in order to illustrate how existing practices in requirements tracing could be leveraged.

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An action research study on roadmapping problems of two software product companies in order to shift the focus of roadmapping from prioritization of software features to analysis and prioritization of customers' processes

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A set of four experiments with students on the impact of System Sequence Diagrams and System Operation Contracts in order to assess the quality of the system domain model

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A method for generating a set of obstacle conditions corresponding to exceptional conditions that may obstruct system goals in order to detect missing requirements.

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A method for reasoning with partial models that capture uncertainty coming from multiple open choices in early specification stages in order to support modeling when requirements are still to be clarified

A method for automating the construction of traceability links for architectural tactics in order to support software maintenance and preserve architectural qualities

A method for transforming security policies expressed in natural language to a formal, processable form in order to detect inconsistencies in access control policies

A method for conducting failure analysis of systems that consist of several interacting component in order to integrate FMEA and system modelling.

An experience report on challenges and potential solutions of a supplier company with respect to tender processes.

A template for systematically  
deriving requirements  
elicitation instructions in  
Application Engineering  
processes in order to elicit  
requirements more effectively

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A literature study on  
understanding the strengths  
and weaknesses of service  
description methods in order to  
allow developers selecting an  
appropriate description  
method that fits best their  
services

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A case study on planning the  
releases of an evolving  
software solution in the  
presence of low-quality input  
requirement in order to reduce  
release planning effort and  
increase decision-making  
flexibility

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A multi-case study on the use  
of goal-oriented requirements  
engineering techniques to  
improve traceability among  
enterprise architectures and  
business goals

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A study with practitioners,  
researchers and students  
based on an experiment and  
interviews for understanding in  
which context do common  
traceability visualization  
techniques fit better and what  
information to visualize

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A set of reusable queries for  
implementing a blueprint for  
traceability in safety-critical  
systems in order to comply  
with full life-cycle traceability  
as required by certification and  
regulatory agencies

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A modeling language for  
representing and analysing  
requirements for Self-Adaptive  
Systems in order to make them  
readable by non-engineering  
stakeholders

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A method for assessing the  
impact of changes in one  
requirement into other  
requirements in order to  
analyze the impact of  
requirement volatility on a  
project plan

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A literature study on the meaning of the word "creativity" in Social Sciences and Requirements Engineering in order to understand which kinds of creativity are relevant to a project and which creativity tools to use

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A case study on the awareness and handling of non-functional requirements among software architects, and their effect on IT project success

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An interview-based study with practitioners on how functional and non-functional requirement mismatches are handled in Open Source Software adoption projects

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A case study on a failed governmental IT project in order to understand the causes of failure from a requirements perspective

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A method for aligning and reconciling requirements from multiple jurisdictions (municipalities, provinces, nations) in order to reduce the number of requirements a company must comply with.

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A method for individual users to express privacy preferences, which are then used to reason about privacy for each user in different contexts.

An experience report on two requirements reuse strategies applied in one company in order to compare savings in reduced effort by reusing common requirements.

A solution for monitoring requirements in software systems by maintaining an instance of a state machine for each requirement in order to enable runtime monitoring and compensation capabilities

A field study on 62 applications of the Software Product Management Maturity Matrix that enables product managers to benchmark their organization in order to suggest improvements of the matrix.

A discussion of Requirements Composition Tables (RCTs), which structure an application's functionality by core features and crosscutting concerns in order to explain this concept to practitioners and discuss its benefits

A solution for comparing  
requirement sentences with  
domain-related documents in  
order to identify ambiguities in  
natural language requirements  
specifications.

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A solution for automatic  
detection of speculative  
language use in natural  
language requirements in  
order to identify and uncover  
uncertainty in requirements.

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A method for modeling  
regulations with a particular  
requirement specification  
language in order to help  
getting a more precise  
understanding of who complies  
with what.

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An experience report on  
categorizing requirements in  
large systems engineering  
projects in order to present  
practical issues with  
requirements categorization

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A method for detecting and  
classifying clarification events  
in online requirement  
discussions in order to  
highlight risks related to  
shared understanding.

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A method for relating security-relevant assets to requirements and objectives of an attacker in order to analyze system security in different situations and to enable a set of countermeasures to mitigate security threats.

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A study based on an online-survey on how product management practitioners understand the term product management in order to evolve product management frameworks and develop necessary skill sets for education of product managers.

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A case study on the selection of the most appropriate value-based requirements prioritization framework given the requirements of a particular company

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A method for quantitatively analyzing contribution relationship measures in goal models in order to support informed decisions about different solutions to requirements problems.

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An experiments with students  
for understanding when and  
why humans make correct and  
incorrect decisions during  
tracing tasks with the support  
of a trace matrix that  
visualizes progress

A method for scenario-based  
specifications of component  
interactions in order to find  
inconsistencies between  
specifications of many variants  
in product lines

An interview-based study with  
practitioners on how software  
architects deal with non-  
functional requirements in  
order to increase knowledge  
about the state of the practice.

A solution for mining "requires"  
or "excludes" constraints in the  
construction of feature models.

A solution for automatically  
detecting outdated  
requirements based on  
changes in the code in order to  
keep requirements  
specifications up-to-date

A method for managing and  
reducing requirements  
uncertainty by partial  
requirements models so that  
uncertainty can be made  
explicit and incrementally  
removed

An experience report on applying a visual requirements modeling language that mitigates some of the weaknesses of UML in describing requirements.

A method for predicting what areas of a proposed legal rule are most likely to evolve in order to allow engineers to begin building their software towards the more stable sections of the rule.

A solution for recommending trace links while creating or modifying traceable artifacts in order to avoid trace link creation towards the end of a project.

A discussion on view-based requirements specifications including challenges and research questions in order to better understand the particular information needs of downstream development roles.

A solution for extracting and ranking requirement candidates based on an analysis of web server logs in order to improve requirements elicitation and prioritization

A solution for identifying and resolving feature interactions at the level of requirements specifications in order to detect undesirable behavior earlier in the development life-cycle.

A modelling language for modelling the behavioural requirements of a software product line in order to ease the task of adding new features to a set of existing requirements.

A discussion on the state of the art in traceability, the grand challenge for traceability, and future directions for the field in order to increase the pervasiveness in industry.

A method for annotating goals and assessing obstacles with probability measures in order to increase requirements completeness.

A study based on review inspections and interviews with practitioners on the most critical and important quality criteria for natural language requirements specifications

An experiment for testing the hypothesis that adding a requirements analyst who is ignorant of the domain improves the effectiveness of the requirements elicitation team.

A solution for grouping generated trace link candidates in high-quality and low-quality clusters in order to improve the accuracy of automatic trace link recovery tools.

An experience report on how the use of RE methods in DNA nanotechnology contributes to make DNA nanotechnology more productive, predictable, and safe.

A multi-case study on how frequently do some classes of requirements appear in specifications for web-based enterprise systems

An interview-based study with practitioners for understanding the adjustment of requirement management practices after the adoption of open source software in order to facilitate open innovation

An experiment with students  
for assessing the effect of real-  
time machine translation on  
multilingual terms in order to  
leverage communication power  
in globally-distributed,  
multilingual project meetings

A set of two experiments with  
students and practitioners for  
investigating whether the  
granularity and cognitive  
support of prioritization  
techniques affect the  
judgement of product features  
as essential

A data-driven study on  
analysing the data collected  
via data mining from a  
commercial game over a three-  
year period in order to provide  
recommendations for future  
development.

A method for supporting  
adaptation to non-functional  
manifestations of uncertainty  
in order to optimize the  
system's ability to meet its  
non-functional requirements

A method for finding the root  
causes of the non-realizability  
of a scenario-based system  
specification in order to detect  
conflicts in the specification

A case study on the impact of  
issue report misclassification  
(between feature and bug) in \_\_\_\_\_  
order to improve bug  
prediction

A multi-case study on how  
information flows between  
different human roles in  
software projects with  
contrasting distributions of \_\_\_\_\_  
domain knowledge and  
different communication  
structures.

A method for synthesising  
response time requirements of  
component services in order to  
guarantee the global response \_\_\_\_\_  
time requirement of a service  
composition

A framework for supporting the  
selective disclosure of personal  
information according to  
context information (time,  
location, ...) gathered at \_\_\_\_\_  
runtime in order to  
continuously satisfy privacy  
requirements

An experiment with students to  
understand how requirements  
analysts seek and gather  
information when linking \_\_\_\_\_  
requirements to other software  
artifacts

A method for analysing large  
sets of user feedback in order  
to extract new/changed  
requirements for next versions

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A method for automatically  
deriving a machine  
specification satisfying a set of  
goals in a domain in order to  
reducing requirement  
modeling effort

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A method for automatically  
extracting a feature model  
from publicly available natural  
language product descriptions  
in order to speed up such  
feature model extraction  
process

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A method for transforming an  
under-specified visual design  
mockup drawn by the designer  
to an accurate and flexible web  
page with virtually no manual  
effort

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A method for recovering  
traceability links between  
software artifacts that can be  
configured at runtime in order  
to optimize trace quality

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A technique for both analyzing specifications of a product line to ensure that it is realizable and automatically synthesizing software components that show which sequences of actions the system can do to implement the specification

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A study based on practitioner interviews and project data to create a framework to assess requirement-ambiguity risk in order to understand the relationship between requirement ambiguity and project success

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A case study for evaluating the suitability of a new software release planning (SRP) process in order to improve and customize SRP in practice.

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A method for identifying relevant groups of stakeholders in order to to enable facilitated decision-making and handling of requirements

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A case study on understanding software product management challenges in order to understand how the evolving management style has affected the way product requirements are managed

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A case study for analysing the emergence of mutual and shared understanding in the written communication of a multidisciplinary team in order to support effective collaboration

An interview-based study with practitioners for understanding what traceability usage scenarios are most relevant for practitioners in order to provide a better traceability support.

A method for grouping similar requirements in order to ease and allow a proper understanding of a requirements document.

A method for selecting a regulatory compliance solution that best suits the stakeholder preferences.

A literature study for understanding how the distance between RE and other development activities affect coordination and alignment to meet customer needs

A case study for understanding the challenges of use case and requirements analysis in a low-tech rural environment

A method for automatically finding ambiguities in RE documents in order to avoid the need for manual checks

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A method for architecting systems that contain requirements with consequences over the software architecture in order to ensure the architecture meets the requirements

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A document-driven study for analysing RE-related job advertisements in order to determine how practitioners perceive and staff requirements engineers.

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An experiment with students for comparing two requirements elicitation approaches when instantiating a Software Product Line (SPL) in order to understand which approach is more suitable for eliciting requirements when using SPLs.

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A method for eliciting and modeling requirements for motion-based games for physiotherapy in order to guide the patients in performing the right movements for their rehabilitation

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A method for supporting  
decision making for self  
adaptive systems in order to  
deal with uncertainty at  
runtime

A method for modelling i\*  
elements in UML in order to  
enable the usage of existing  
UML tools for i\*

A method for gathering  
feedback before a user has  
had experience with a software  
system in order to reduce the  
mismatch between actual and  
predicted user satisfaction

An interview-based study with  
practitioners for understanding  
how software architects cope  
with quality requirements in  
the context of large software  
system projects

A method for expressing legal  
requirements in order to  
overcome significant  
challenges in managing the  
many laws that govern their  
systems in a multi-  
jurisdictional environment

An interview-based study with  
practitioners on requirements  
traceability across  
organizational boundaries in  
order to identify current needs  
and challenges.

A case study for analyzing whether requirements with related information spread over many sections of many documents can be automatically classified

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A case study for understanding the root causes of failed software projects in order to identify risk areas and provide practical guidance to practitioners

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A case study on requirements brainstorming sessions considering knowledge of the domain as the factor to be measured in order to assess the effectiveness of idea generation

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A method for identifying unstated assumptions in composite service-oriented applications in order to decrease the risk of unexpected behavior

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A literature survey on requirements elicitation techniques and a roadmap of research in order to improve the elicitation of tacit knowledge

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A method for predicting  
integration bugs based on  
network measures calculated  
over requirements dependency  
networks

An interview-based study on  
requirements elicitation  
techniques used by cloud  
providers in order to clarify  
challenges related to  
requirements elicitation posed  
by the cloud paradigm

A method for refactoring new  
and inconsistent terminology in  
requirements in order to  
enhance the practicality of  
automated tracing tools.

An experience report on the  
development of three  
generations of a product in  
order to assess the positive  
effects of well-written and well-  
reviewed requirements on the  
quality of the final product

A method for designing RE  
visual notations based on large  
groups of novices instead of  
small groups of experts in  
order to increase novice's  
ability to interpret RE notations  
correctly.

A solution for formally checking incomplete high-level specifications against formally specified requirements in order to integrate formal verification with agile approaches.

A method for automatic extraction of glossary terms from natural language requirements

A case study on feature interactions in an automotive software system in order to assess the extent, awareness, and importance of interactions between features

A solution for leveraging a knowledge base of domain concepts and their relationships for fully automated creation of traceability links in order to increase precision and recall

A method for systematically inspecting requirements specifications in order to increase their quality

A data-driven study on user feedback in app stores investigating how and when users provide feedback, the content of that feedback, and the impact of the feedback on the user community.

An experience report on the requirements engineering process for a national Police Force Crime Records Management System in order to present key challenges

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A method for analyzing the structured relationships between requirements in order to validate requirements for completeness, correctness, and consistency.

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A method for extracting a set of independent components from requirements descriptions in goal models in order to help analyzing the impact of requirements changes in the source code

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A method for eliciting requirements for new telemedicine applications in a collaborative setting of time-constrained medical practitioners and requirements engineers in order to ensure compliance with medical protocols

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A method for translating IT regulations into a legal requirements coverage model used to make coverage assertions about existing or planned IT systems in order to help developers identifying relevant legal requirements

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A method for decomposing and structuring the behavioural requirements of a feature based on modes of operation (e.g., Active, Inactive, Failed) in order to provide a generic behavioural interface for features.

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A study based on an online-survey on the ability of software engineers to understand the impact of cross-references in legal regulation texts over their software systems.

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An experience report on the use of domain analysis to characterize current practice of applying requirement-based test generation at one industry partner in order to enhance the reuse of test artifacts across different products.

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A solution for generating trace links between textual requirements artifacts based on machine learning in order to improve automatic link recovery techniques.

An experience report on factors that affect when having solution information in requirements is sensible and when it should be avoided in order to increase the understanding of practitioners.

An experience report on the integration of software architecting and decision-making methods in order to select a common service oriented architecture tool that could satisfy the needs of different business units.

A method for using defect taxonomies in order to improve requirements reviews and testing.

A method for metric-based prediction of requirements that are likely to evolve in order to narrow the scope of change analysis to a small set of requirements.

A solution for automatically mapping newly defined system requirements to corresponding system components in order to prevent requirements inconsistencies and help identify further necessary requirements.

A method for mapping natural language policy requirements to a formal representation in order to to reason about conflicting requirements within a single policy and among multiple policies in a data supply chain.

A discussion on the major challenges of reviewing requirements specifications in industry in order to align research activities to add more value for the software industry.

A literature review on visual requirements analytics, a field that aims at increased interactivity of requirements visualization in order to lead to actionable decisions

A multi-case study on the readability of policy documents for requirements engineers and assessing if automated text mining can indicate whether a policy document contains requirements

An interview-based study with practitioners on the quality and suitability of a project's traceability strategy in order to identify common problems across traceability strategies and their possible causes.

A data-driven study on requirements artifacts and processes in open source systems, where classical software engineering is not employed in order to identify risks of development failures and consequences for system quality.

A project-based study with students on a semi-automatic tool to capture implicit traceability links from requirements to code in order to evaluate the feasibility and practicability.

A case study for validating a tool that automatically checks the conformance of requirements to a given template in order to reduce ambiguity in natural language requirements

An experiment with students  
for investigating the  
relationship between time  
pressure and efficiency in test  
case development and  
requirement review

A method for self-adapting the  
architecture of a software  
system to the changing  
requirements and contexts at  
runtime in order to improve  
effectiveness and flexibility of  
adaptation

A method for extracting a  
model showing traces between  
software artifacts and  
analysing this model to identify  
areas of traceability failure

An online survey with  
practitioners and academics on  
how users and developers from  
various geographical locations  
perceive privacy and which  
concrete measures would  
mitigate their privacy concerns

A method for extracting and  
refining privacy requirements  
for mobile applications from  
raw data gathered through  
empirical studies involving end  
users

A method for describing  
uncertainty about the impact  
of design alternatives on  
stakeholders' goals and  
calculate the consequences of  
such uncertainty

An experiment with students  
on the effects of present  
customer desires as  
requirements or as ideas on  
design creativity

A method for deriving  
structured requirements  
models in the form of process  
diagrams and ontologies from  
textual use case requirements

A case study on the use of  
issue tickets generated by  
stakeholders' requests to track  
requirements evolution for a  
large-scale system

A framework for allowing  
requirements engineers and  
non-technical stakeholders to  
perform model checking during  
elicitation, analysis and  
verification of system  
requirements

An experience report for  
presenting and comparing  
examples of various  
approaches to teaching RE in  
order to inspire instructors to  
seek additional learning  
approaches.

A online survey with  
researchers and academics for  
identifying benefits, domain  
areas, and challenges for social  
adaptation.

A method for systematically  
managing obstacles and  
refining compliance goals in  
order to support the  
elaboration of compliance  
requirements.

A method for detecting  
inconsistencies in temporal  
constraints in order to verify  
the consistency of temporal  
requirements

A model for capturing and  
representing traceability in  
order to provide safety  
evidence on safety-critical  
systems

A method for comparing the  
results of multiple priority-  
based decision heuristics in  
order to identify the best  
heuristics for deciding which  
requirements should be  
refined/elaborated first.

A method for weaving the  
feedback from the runtime  
system into requirements  
documents in order to keep  
development time and runtime  
requirement models consistent

An experiment with students  
for exploring the effect of  
collaborative interactions  
between clients and analysts in  
the process of requirements  
validation.

An experience report for  
identifying understandability  
issues of formal specifications  
and providing writing style  
guidelines in order to make  
formal specifications  
understandable.

A method for acquiring,  
modeling and analyzing  
regulatory requirements in  
order to conform to regulations  
on safety-critical system.

An interview-based study for  
understanding current  
practices of user-developer  
communication in IT projects in  
order to identify issues and  
enhance user-developer  
communication.

An online survey with  
practitioners for identifying  
causal relationships between  
requirements elicitation issues  
and project performance in  
order to strengthen the  
execution of RE activities and  
reduce risk on project  
performance



An interview-based study with practitioners for understanding how the game industry applies RE in practice

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A method for identifying unwanted interaction between requirements in order to address the diverse interests of different stakeholders in a coherent way

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A case study for comparing different approaches to categorization of natural language requirements in order to understand the best way to achieve effective communication and prioritization

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A method for transforming requirements for service-based systems to QoS-aware choreography specification in order to deliver more adaptive software systems

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A method for measuring and improving the completeness of natural language requirements with respect to the input documents in order to include all the relevant information from these documents

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A literature study for identifying and categorizing research in self-adaptive systems requirements modeling and analysis

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A method for resolving exceptional conditions that may obstruct the behavioral goals of the target system in order to progress towards a more complete model of stakeholder goals.

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An experience report on the adoption of a persona-centric requirements framework in order to show its ability to quantify user experience.

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A case study on collaboration networks between small and medium-sized software companies in order to investigate the impact to software product management and requirements engineering practices.

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A case study on a protocol for deriving functional safety requirements from Fault Tree Analysis results in order to increase the safety of critical systems.

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A case study on requirements engineering in open commercial development models describing the flow of product requirements information through the ecosystem

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A method for specifying and validating feature-oriented requirement models in order to avoid behavioral inconsistencies between features.

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A method for finding suitable trade-offs and priorities when complying with multiple regulations while at the same time trying to meet business objectives.

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A solution for automatically filtering, aggregating, and analyzing user reviews to systematically analyze user opinions about single features

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A case study on the transformation of a set of natural language functional requirements to a semi-formal pattern notation in order to investigate the applicability of this process in the automotive domain.

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A method for representing requirements and conflicts as a jigsaw puzzle in stakeholder meetings in order to improve commitment of stakeholders in co-authoring of requirements and co-responsibility in conflict handling

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A solution for automatically detecting cross references in legal documents and linking them to the target provisions in order to improve the elaboration of compliance requirements.

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A method for requirements discovery for health care systems in order to increase the acceptance by the target user community.

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A method for selecting the most appropriate security requirements pattern in order to decrease the time spent in the requirements elicitation process and improve the quality of the product.

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An interview-based study on how game developers reason about gameplay requirements and handle them in their projects in order to improve the elicitation and validation of gameplay requirements.

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A method for requirements elicitation based on interactions of autonomous parties and the participants' social relationships in order to improve the requirements engineering for sociotechnical systems

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An experience report on the use of a method for discovering customer requirements to configure an off-the-shelf software package.

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A solution for automatically identifying security-relevant sentences in natural language requirements and translating them into functional security requirements in order to strengthen the overall security of the system.

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A method for estimating the size of an application previous to its requirements specification by using the application language itself, captured by a lexicon in order to get estimations earlier.

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A solution for extracting familiar ideas from the documented requirements and stakeholders' comments and automatically obtaining unfamiliar idea combinations in order to generate innovative requirements.

An interview-based study on how practitioners understand, capture, and use business rules in order to describe constraints in a domain.

A case study on the requirement elicitation for a recommender system that supports therapists in selecting motion-based video games to treat patients with brain injuries.

A method for eliciting quality-impact relationships and using them to specify quality requirements in order to achieve good-enough quality.

A method for visualizing how IT impacts are linked to business value, and how much and when value is realised in order to evaluate IT business value on a company level.

An experience report on a system provider/sub-contractor collaboration centered around design-level requirements in order to report lessons learned regarding requirements representations, requirements tools, and cooperation process.

A solution for combining adaptation decisions based on goals with past experiences of successful adaptations in order to improve adaptation effectiveness and overall system quality.

A method for analyzing goal satisfaction resulting from resolved uncertainty in order to support early requirements decision-making in the presence of uncertainty.

A solution for exploiting the information contained in previously defined trace links in order to facilitate the creation and ongoing maintenance of trace links as the requirements evolve.

A method for assessing the quality of RE processes and artifacts in a company in order to identify issues and potential improvements

An experience report on using goal modelling to incorporate sustainability into the procurement system of a large multinational energy company in order to evaluate the suitability of the technique for such a purpose

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A method for detecting vulnerabilities in requirements of long-living software systems based on reported security incidents in order to keep long-living systems "up-to-date" with respect to security.

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An experience report on applying a combination of RE methods to elicit performance requirements in an existing system from the process automation domain in order to improve performance testing.

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A study based on experiments with crowd workers on extracting requirements from natural language text sources by untrained workers in order to evaluate the cost and quality of crowdsourcing RE tasks.

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A data-driven study on the use of a requirements inspection methodology in more than 140 projects in order to discover correlations between requirements specification quality and project costs or product quality.

A method for identifying ambiguity in legal texts in order to prevent software engineers from implementing software that does not comply with the regulations.

A modeling language for defining non-functional requirements (NFRs) based on the fulfillment of other requirements in order to specify unambiguous, de-idealized, and measurable NFRs.

A method for capturing the uncertainty of feature evolution in feature models in order to decide which features to implement next.

A method for locating where software should be refactored and which refactorings should be applied in order to fulfil unsatisfied stakeholder goals.

A solution for writing or speaking trace queries in natural language in order to lower the barrier for utilizing trace data.

An experience report on representing and reusing product knowledge for product customization in order to identify requirements for product variants.

A solution for automatic extraction and modeling of quality concerns from textual documents such as requirements, feature requests, and online forums in order to elicit quality requirements

A case study on the use of a tool for specifying requirements based on two types of knowledge-reuse artifacts in order to evaluate the effects on requirements ambiguity and inconsistency.

An experience report on eliciting user requirements with a non-standard user population: visually impaired users.

A solution for identifying violations of security requirements that may be caused by topological changes of the environment and selecting security controls that prevent such violations.

An online survey on the ability of laypersons, technical professionals, and legal experts to judge the similarity between legal coverage conditions and requirements.

An experiment with students for determining whether practicing mindfulness for four weeks enhances conceptual modelling skills in order to improve professional performance of software engineers

An interview-based study with practitioners for understanding how software architects working on large, distributed projects are involved in engineering quality requirements.

An online survey with practitioners and academics for validating the acceptance and impact of an approach based on artifacts and scenarios

A case study for validating a technique for clustering keywords extracted from natural-language requirements in order to support the automatic construction of project glossaries

A case study for including quality requirements in a software release planning technique in order to demonstrate the benefits in terms of release time and product scope

An experience report on the use of a lean methodology to identify security requirements in order to integrate them in the software production cycle

An experiment with students for assessing a technique that automatically suggests appropriate security requirements templates implied by existing functional requirements

A method for the efficient model-based verification of product line requirements in order to detect and correct requirement errors early.

A method for automatically extracting goal and use case models from natural language requirements documents in order to support further analysis of the extracted models.

A case study for identifying metrics that evaluate feature models in order to quantify the success of feature models in practice.

A method for transforming informal requirements into formal ones in order to reduce requirements defects.

An industrial study using interviews and surveys for investigating the design of Digital Addiction labels in order to meet ethical and professional requirements.

A workshop-based industrial study on the usability of user stories in order to embed human values in the requirements engineering process.

A set of metrics for assessing and quantifying requirement relations in agile development in order to estimate implementation risk of requirements.

A case study on the customer challenges and demands on requirements engineering processes in order to bring the customer perspective into outsourced projects.

An industrial study using experiments and focus groups for understanding whether the use of catalogs of threats and security controls affects the actual and perceived effectiveness of a security risk assessment method.

A literature study for identifying and categorizing prioritization criteria in order to customize prioritization criteria to a particular project situation.

A case study for evaluating a particular approach to release planning in order to reach the market as early as possible with a competitive level of quality.

A method for analyzing and enforcing security mechanisms on system requirements in order to precisely capture the impact of security in the system.

A method for integrating  
several types of contextual  
information into a  
diagrammatic representation  
in order to improve the  
validation of functional safety  
requirements.

An experiment with students  
for assessing an existing  
availability risk assessment  
method in order to improve its  
reliability.

A method for the mutual  
adjustment of conflicting  
requirements between  
business and IT perspectives in  
order to get seamless  
alignment between these two  
perspectives.

A method for modeling and  
reasoning about information  
quality at requirements level in  
order to avoid low-quality  
information for critical  
systems.

A method for semi-  
automatically translating  
natural language requirements  
into a formal language in order  
to validate natural language  
requirements

A method for consolidating behavioral requirements and functional design in order to avoid behavioral requirements of the system become outdated.

An interview-based study with practitioners for understanding how practitioners in various roles use requirements artifacts in order to support better requirements communication.

A method for integrating user feedback involving geographically dispersed stakeholders in order to facilitate forum-based requirements elicitation.

An experiment with practitioners and students on generating creative ideas and requirements in creativity workshops in order to evaluate the effectiveness of different creativity techniques.

A method for managing uncertainty about estimates of likelihoods of obstacles to goal satisfaction in order to facilitate risk-based methods for RE.



A method for analyzing feature life cycles in app stores in order to help app developers identify trends and find undiscovered requirements.

An experience report on practical realities an organization faces in attempting to reuse requirements, including a requirements reuse process, encountered problems, obtained results, and plans for future improvement of the process.

A solution for checking 14 quality criteria in user stories that user story writers should strive to conform to in order to turn raw user stories into higher-quality ones.

A method for analyzing privacy properties in service-oriented architectures based on a data flow model in order to reduce privacy and security risks when integrating third-party services.

A method for semi-automatically exposing whether the unanticipated behavior of the operational context can result in undesired system states.

A study based on an online-survey on how changes to security requirements affect analysts' risk perceptions in order to understand how the analysts perceive risks in composed systems.

A literature study for identifying dependent variables used in experimental requirements engineering research.

A model for monitoring the compliance of a System of Systems (SoS) with its requirements at runtime.

A data-driven study for comparing several probabilistic techniques to classify app reviews from app stores in order to assess their accuracy.

A document-driven study for understanding and classifying ambiguity occurring in customer-analyst interviews in order to improve the use of interviews during requirements elicitation.

A method for acquiring the knowledge of various stakeholders along multiple dimensions of problem space and design space in order to elicit the users' requirements in self-adaptive systems.

An interview-based study for identifying categories of probing questions in order to prompt business analysts to elicit architecturally significant functional requirements.

A solution for specifying preferences over goals through natural language statements in order to the comparison of alternatives during the specification process.

An interview-based study with practitioners on the flow of requirements in the process of automotive software development and strategies to refine requirements iteratively throughout their life-cycle.

A method for inferring the test status of requirements based on the test status of structurally related requirements in order to better assess the quality of the system.

A solution for determining the quality of trace links and detecting unacceptable deviations in order to support the systematic assessment of a project's traceability.

An experience report on challenges in creating testable experience requirement for entertainment applications (e.g., games).

A case study for investigating which changes requirements engineers perform on use cases over time and which of them are more problematic in difficulty or risk in order to understand the maintainability of use cases.

A solution for calculating how likely a natural-language requirement statement is to be impacted by a change in order to automatically analyze how a change to one requirement impacts other ones.

A method for eliciting a model of all operational states of a system in order to ease the specification of features based on these operational states.

A method for capturing inconsistencies between stakeholders' goals and beliefs and resolving goal conflicts.

A case study on prototyping in an agile RE project in order to examine the potential to solve the challenges of agile RE, especially the lack of documentation, the motivation for RE work, and poor quality communication.

A document-driven study in the industry on the use of passive voice and weak words in requirements showing that passive voice is almost never problematic.

An experiment with students and practitioners on the use of a mobile tool for model-based sketching of free-form diagrams allowing for the definition and reuse of diagramming notations on the fly in order to assess the usefulness of the tool.

A solution for automatically extracting and tracking non-functional requirements from the textual content of requirements specifications.

An experience report on a failed project in which the customer eventually decided to take over the development themselves in order to investigate requirements-related root causes for such decision.

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A set of two empirical studies (online survey to practitioners and experiment with students) on the creation and use of software requirement specifications in companies and the impact of their quality in subsequent development activities.

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A case study on the effectiveness of a particular method to visually represent requirements evolution histories.

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A document-driven study on the differences between documented non-functional and functional requirements in industrial requirements specifications in order to assess how sharp this distinction is in practice.

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An interview-based study on reusable probing questions used to gather information for architectural decision-making in order to equip business analysts with these questions.

A method to automatically revise goals that may be underspecified or partially wrong to resolve obstructions in a given domain.

A method to discover security requirements in continuously evolving threat landscapes which lead to new tacit knowledge that is embedded in or across a variety of security incidents.

An interview-based study to explore requirements engineering practitioners' perceptions and attitudes towards sustainability.

An experience report on teaching requirements engineering for undergraduate students.

A method for automatically identifying the impact of requirements changes to system design using SysML.

An experiment with students  
for analyzing different software  
engineering tasks that affect \_\_\_\_\_  
the tracing of the same  
requirement.

A specification language for  
modeling both rich  
configurations and expressive  
temporal properties in order to \_\_\_\_\_  
make formal verification of  
systems involving these  
properties.

A method for automatically  
decomposing on-the-fly formal  
specifications and verify them  
seamlessly in order to support \_\_\_\_\_  
industrial-scale applicability of  
formal verification techniques.

A method for runtime self-  
adaptation ensuring the  
satisfaction of multiple goals  
while simultaneously reaching \_\_\_\_\_  
optimality to an additional goal  
and achieving robustness to  
environmental disturbances.

A method for on-line analysis  
of formal specifications able to  
cope efficiently with the  
evolution of such specifications \_\_\_\_\_  
in order to support adoption of  
such techniques in industrial  
contexts.



A method for mining performance specifications from running systems that allow performance regression testing and performance monitoring.

A method for deciding the plan for the next software release considering the risk of different perceptions of value and different revenues associated with multiple (groups of) stakeholders.

A method for integrating goal-oriented requirements engineering and multi-criteria decision making for problem modeling and analysis.

A data-driven study on the performance of a set of information retrieval algorithms for computing traceability in issue tracking systems.

A case study on understanding how stakeholder influence and collaboration patterns evolve over time and how innovation and time-to-market evolve over the same period of time.

A multi-experiment with students for comparing the accuracy and performance of different query representation techniques in order to improve the ability to provide critical feedback to users making queries.

A method for searching certain classes of potential problems in business process models related to their incompleteness of the ambiguity of their labels.

A method for classifying automatically legal cross references across several provisions which refer to a single compliance requirement.

A case study on measuring the frequency of eight types of requirements defects (e.g., incompleteness) and refining them according to nine possible defect sources (e.g., wording).

A model for relating gamification, stakeholder engagement and RE performance in agile processes in order to increase stakeholder engagement adequately in each RE phase.

A data-driven study for uncovering detailed relations between requirements and design decisions and demonstrate the effectiveness of a particular documentation approach for decision-related knowledge.

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A multi-instrument study (survey followed by interviews) with industry on their productivity and the quality of their working documents when using user stories.

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A literature review on reported evidence on customer input during continuous deployment in software engineering, including potential benefits, challenges, methods, and tools.

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A literature study on specific threats to validity in controlled experiments with student participants and on mitigation strategies for these threats.

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A conceptual framework for integrating lean principles within design science research phases and outputs exemplified with the planning and execution of software and requirements engineering research projects

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An experiment with students on comparing through eye tracking the way specifications are read depending on their presentation format and considering different role perspectives.

A case study for assessing the impact of a real legal change proposal on an existing specification model using model-based simulation techniques.

A process for putting together agile development, DevOps, and innovation management in order to embed technological innovations into the overall system.

A state of the art report on the status quo, challenges, findings and possible directions in RE for health data analytics.

A method for revising software requirements specifications (SRS) through inspection at two different levels of abstraction in order to assess the SRS quality.

A study based on interviews with practitioners and a literature review for building a body of knowledge for traceability in order to assist engineers how to implement traceability in a project.

An experience report on the process followed to elicit, classify, prioritize, and validate privacy requirements for a privacy platform involving public administration and citizens.

A case study for understanding how experts can elicit security demands from stakeholders of the application domain and derive security policy templates.

A training program for assisting requirement authors through a network of trained experts in the context of large projects with dozens of such authors.

An ontology for describing properties of data and systems that allow to generate and manage privacy requirements in order to integrate the legal and engineering perspectives.

An experience report on applying a tailored INCOSE requirements engineering process to the specificities of retrofittable subsea equipment systems.

A multi-case study with practitioners on the lessons learned using a set of templates for requirements written in natural language during six years.

A method for specifying changes in intentions over time and simulating such changes in order to make trade-off decisions about the evolution of requirements.

An online survey on the ability of laypersons, technical professionals, and legal experts to judge the similarity between legal coverage conditions and requirements.

An interview-based study with practitioners for identifying a set of cues appearing in linguistic expressions that typically lead to ambiguity in order to improve customer-analyst communication.

A study based on case studies and interviews with practitioners for identifying challenges involved in collaborative traceability management and how traceability can be used to enable collaboration.

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A process for automatically discovering requirements knowledge from large sets of domain documents in order to assist organizations in entering new domains.

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A framework for helping analysts in identifying system misuse cases using formal reasoning about social norms in order to avoid data breaches originating from such misuses.

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A framework for specifying performance requirements based on sentence patterns in order to reduce their level of incompleteness.

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A tool for connecting textual notes and video recording when holding requirements elicitation workshops supporting enhanced analysis in order to mitigate the scribe's overload.

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A literature review on the existing approaches in goal-oriented RE in order to provide research directions in this area.

An experiment with students for validating that modeling separately the stakeholder viewpoints and then explicitly merging them leads to a richer domain understanding than constructing a single coherent requirements model.

An interview-based study with practitioners for knowing the current practices of presenting and manipulating artifacts in documentation tools in order to understand how well these tools support requirements engineers.

An experiment with academics for exploring the impact of violating goal model layout guidelines onto the understandability of the requirements represented in such model.

A data-driven study for understanding the communication about software applications on Twitter and its relevance for RE and software evolution.



A method for eliciting security requirements related to the acquisition of information about the system by methods that deeply include non-technical means.

An interview-based study with practitioners on the current practices for writing, maintaining and linking requirements and acceptance test documentation in agile projects.

An analysis of the adequacy of different natural language processing techniques and machine learning features for identifying software feature requests in issue tracking systems.

A model for understanding the implications of privacy requirements vagueness in aligning company's privacy policies with their data practices in order to reduce privacy risks.

A literature review on the existing approaches in the visualization techniques available in RE.

A case study on generating and rating ideas from the crowd in order to understand how human personality and creative potential influence requirement acquisition from the crowd.

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A method for automatically deriving conceptual data models from user stories written in natural language in order to create a holistic view of the requirements specification,

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A method for enlarging traditional traceability approaches with information linking documents generated during traditional and agile methodologies in order to ease the transition to agile development.

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A case study on the need for requirement change control policies and formal processes to coexist with informal requirement change management in globally distributed settings.

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A taxonomy for classifying requirement errors and for guiding developers to find additional faults based on the type of usual human errors in order to avoid requirement engineers to make the same errors in the future.

A data-driven study for understanding the effect of size and layout flaws in the comprehension of several types of UML specification models.

An experiment with students for investigating reading patterns and learning styles of software requirement inspectors for in order to enhance inspection team outcome.

A framework for supporting a systematic and comprehensive discovery of security goals for a system.

**Please provide a brief explanation for why you provided one of the lowest ratings to the following piece of research.**

A method for automatically recovering software traceability links between various software artifacts based on topic modelling (requirements, design, code, bug reports, test cases)

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A set of two techniques for improving the quality of traces generated between regulatory standards and product level requirements

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A case study on evaluating a given technique for identifying and prioritising stakeholders in order to involve the right stakeholders in system analysis

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An experience report on the development of a methodology and tools for the formalization and subsequent validation of specifications in a project for the public administration

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A document-driven study on the relevancy of clones in industrial requirements specifications and of clone detection as a requirements quality assurance technique

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A case study on the effects of a highly ambiguous requirements document on project success

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A data-driven study on the importance of quality requirements throughout the system lifecycle

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An interview-based study with practitioners for identifying key challenges in aligning requirements and verification processes in order to assure that the developed software product satisfies customer requirements

---

A tool for automating ambiguity detection and explaining the sources of the detected ambiguities in order to improve natural language specifications and educate software analysts

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An experiment with practitioners for evaluating the adequacy and feasibility of an existing software product line design method in order to prepare software product lines for likely future adaptation needs

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A method for developing scenarios at multiple abstractions levels and check their consistency in order to specify complex software-intensive systems

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An industrial evaluation based on benchmarks for comparing and assessing the suitability of two requirements prioritization techniques

A method for reasoning about likely sources of uncertainty in dynamically adaptive systems in order to apply the right adaptation strategies

A case study for collecting lessons learned from integrating Specification Templates, Collaborative Workshops, and Peer Reviews in RE

A method for visualizing how cyber-attacks are performed in an architectural context in order to closely intertwine requirements and architecture in the development of secure software

An experiment with students on the effectiveness of three creativity enhancement techniques to be used during requirements elicitation

A method for semi-automatically recovering traces in natural language specifications in order to be compliant with industrial standards

A case study for validating a multi-level approach for planning and managing variability and reuse across independent product ranges in a product family

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A method for using low-effort ad-hoc videos as a concrete representation of early requirements in order to avoid misunderstandings in the early phases of a project

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A method for building domain ontologies suitable to guide requirements elicitation in order to reconcile gaps in the knowledge and common understanding among stakeholders

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An interview-based study for explaining the causes of an unsatisfactory RE process in a company in order to identify improvement points

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An analysis on the integration of non-functional requirements into model-driven development processes in order to include this type of requirements into such processes

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A method for systematically and repeatedly exchanging requirements between manufacturers and suppliers.

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A method for formally representing requirements in order to facilitate their analysis and serve as basis for the testing process

A multi-case study on agile prioritization and business value delivery in order to empirically corroborate or contradict some common assumptions on agile practices

A process for creating traceability links between safety requirements, safety taxonomies, and safety risks in order to assure and recertify legacy safety-critical systems

A method for assessing the completeness of specification documents in order to avoid subjectiveness in such completeness assessment

An experience report on the value provided by requirements traceability in a commercial engineering company and a discussion of success factors

An experience report on the development of a simulation tool for the communication along requirements modelling.



An experience report on modeling a safety critical domain using a formal method in order to better understand its adequacy for domain engineering

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A method for structuring a system so that critical requirements are localized in reliable subsets of its components in order to guarantee system's dependability largely by construction

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A document-driven study for refining, assessing and deriving lessons learned of a set of templates for requirements written in natural language

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A method for specifying confidentiality requirements in service level agreements in order to provide proof of being in control of outsourced IT assets

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A method for capturing and reusing patterns of knowledge on non-functional requirements in order to properly manage the large body of knowledge in this field

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A method for using integer  
constraint programming to  
specify product line constraints

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in order to facilitate the  
configuration of a product

A method for eliciting business  
goals and linking them to  
quality requirements of the  
system in order to allow  
software architects to  
understand the business goals  
of the system

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A discussion on the need of  
future research on  
operationalizing requirements  
as runtime entities that can be  
reasoned over in order to  
support self-adaptation  
decisions

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An experience report on the  
application of a requirements  
framework developed after a  
root cause analysis in order to  
enhance customer  
partnerships in an IT company

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An experiment with students  
on investigating if human  
analysts make the right  
decisions when reviewing  
requirements traceability  
matrices generated by  
automated techniques

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A method for generating requirements traceability matrices considering the unique properties of requirements, e.g. small datasets

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A method for grading the implementation of use cases, features and requirements from a usability perspective in order to determine if a product meets its usability requirements

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A modeling language for specifying the system and finding criteria to compare candidate solutions at the early phases of requirements engineering

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A method for allowing end-users to document their needs in situ using their mobile devices in order to support end-user involvement in requirements elicitation

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An online survey with practitioners on understanding what requirements elicitation and representation practices and techniques do not work well in China

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A case study on understanding the effects of system architectures on RE decisions, the characteristics of such decisions and their impact on development activities

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An experience report on the lessons learned from two projects about the transition from classical development process into agile development

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A method for classifying ambiguities in natural language requirements and inform the analyst of the potentially dangerous cases in order to prompt further elicitation

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A multi-case study for a commitment analysis method that can be used to obtain requirements from policy documents in order to validate it

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A vision for proposing the exploration and transfer from other disciplines of creative problem solving practices in order to frame RE as a creative problem solving process

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A case study on the application of a requirements negotiation and handover process in order to study its advantages with respect to requirements volatility and requirements understanding.

A method for incorporating goals that are able to adapt along time into requirement models, which embed adaptation countermeasures that are triggered when goals are violated

A method for selecting the strategic release plan that is most robust against assumed changes in resource allocation and availability

A formal framework for expressing optional and preferred requirements and associated techniques to search for design alternatives that best satisfy the given preferences.

An experience report on the use of a requirements modeling language that relate informal operational concepts with formal simulation models in order to provide reasoning capabilities to such operational concepts

A case study for identifying success factors and challenges involved in persuading review teams to document inspections in order to improve defect discovering

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A method for extending automated analysis of natural language use cases to any other language in order to aggregate multilingual use cases in multi-national projects

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An experiment with students on manually recovering trace links between requirements and code in order to identify where requirements are implemented

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A method for identifying single- and multi-word terms that have a particular significance in a given domain in order to characterize the most salient features of the document in which they appear

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An experiment with students for assessing a given constraint definition technique in order to improve the correctness, efficiency and user satisfaction when using meta-CASE tools.

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An experiment with students on the inclusion of screen mockups in use cases in order to improve the understandability of functional requirements with no significant impact on effort.

A case study for characterizing natural language processing techniques and compare their support in detecting equivalent requirements.

A method for analyzing product descriptions from publicly available online specifications in order to model and recommend product features for a given domain

A method for generating a probabilistic model from a set of requirements in order to verify system requirements at runtime

A method for recovering a feature model from the existing software product line in order to reduce modeling effort

A method for performing semi-automated checking of combined natural language and semi-formal requirements models in order to ensure their consistency, completeness and correctness

A solution for automatically linking bug reports and committed changes in order to recover missing links

A method for prioritizing requirements considering several requirements characteristics, such as stakeholder preferences, technical constraints, implementation costs and user perceived value

A method for supporting use-case analysis that combines exemplary scenarios and general logical rules in order to allow gradually shifting from examples to the final system specification.

A case study for finding out whether a restricted English grammar can be applied in the automotive context in order to support automatic consistency checking

An industrial study based on questionnaires and interviews on the current industry needs concerning methodological support for requirements engineering in the embedded systems domain



An experiment with students  
on a method to support  
creativity in requirements  
engineering in order to get  
evidence about its creativity  
enhancement potential

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A study based on experiments  
with students and a case study  
on the possible benefits of  
considering existing services  
and their alignment with  
requirements at a very early  
stage in order to exploit the  
desired benefits of reuse in  
service-oriented architectures

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A case study on a  
requirements engineering  
improvement project  
consisting of a set of  
techniques applied to solve a  
handful of previously identified  
RE-related problems

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A method for identifying  
security-relevant requirements  
integrated in a workflow of  
requirements analysis in order  
to increase security awareness  
within the software  
development process

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A method for analysing requirements on e-services from the service consumer's perspective in order to make them fit smoothly into the service consumers' business processes

A case study for finding out which concepts of agile prioritization are shared in practice and in literature and how they are used to provide guidance for prioritization

A document-driven study with practitioners and researchers for investigating if use cases are as effective as task descriptions with respect to completeness, correctness and understandability of emerging requirements

An experience report on the use of tools and techniques for systematic elicitation, analysis and documentation of sustainability requirements in order to minimize negative environmental impact of the software under construction

A method for identifying groups of similarly optimal solutions in order to support multi-objective decisions problems

A method for defining efficiently trace links among business application artifacts in order to decrease the developer's workload for setting trace links

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An interview-based study with practitioners on communication gaps in large-scale industrial RE revealing scale, temporal aspects, common views, and decision structures as main factors that affect the requirements communication.

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A method for developing specifications in quick iterations of analyzing and refining a formal specification in order to facilitate rapid evolution of specifications of system features.

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A solution for quantifying the consequence of stopping RE too early in order to avoid avoidable scope creep.

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A method for negotiating requirements induced by the selections of off-the-shelf components in order to prevent a selection of unsuited or inappropriate components

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An experience report on the  
state of the practice of  
requirements engineering in  
the nuclear energy domain in  
Finland

A method for simplifying overly  
complicated requirements in  
order to identify specification  
problems

A method for semi-automatic  
extraction of feature models  
from natural language  
specifications in order to  
support requirements reuse.

A multi-case study on  
prioritization of quality  
requirements in 11 companies  
in order to help future research  
on quality requirements to  
focus investigations on  
industry-relevant issues

An online-survey on factors  
that prevent business analysts  
from applying their  
requirements analysis  
knowledge in practice.

A method for analyzing cross-  
references within legal  
regulations in order to address  
conflicting requirements.

A solution for enabling citizens to report problems with or making suggestions for a software system by smartphone in order to identify new requirements.

A case study on the use of a classification of requirements change sources (e.g., market, organization, specification) in order to support change management, improve understanding and risk visibility.

A case study on the inability of students to assess whether requirements meet their corresponding legal obligations in order to motivate the need for domain experts and the potential utility of legal requirements metrics.

A solution for extracting logical structures (e.g., use cases, business rules or functional requirements) from rich-text documents written in general-purpose editors, such as MS Word in order to enable advanced requirements management features.

A multi-case study on assisted requirements tracing, a process in which an analyst validates candidate traces produced by an automated requirements tracing tool.

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An experience report on the efforts to identify and monitor requirements uncertainty at Rolls-Royce in order to reduce the risk of late rework.

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A method for simulating quantitative goal models in order to estimate the levels of goal satisfaction contributed by alternative system designs and optimize the system design.

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A discussion on applying agile insights to requirements engineering activities in order to optimize allocation of resources to RE activities

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A discussion and solution for examining organizational structures for power relationships in order to support decision-making processes.

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A method for risk assessment  
in context of security  
requirements in order to guide  
the security argumentation in  
identifying rebuttals and  
mitigations for security  
requirements satisfaction.

A method for analysing  
requirements for embedded  
systems in order to separate  
relevant from irrelevant  
context elements.

An experience report on  
applying component-bus-  
system-properties in mobile  
applications in order to refine  
software requirements to  
software architectures.

A method for relaxing quality  
or functional requirements that  
are not crucial to the survival  
of a web system in order to  
increase the availability of a  
specific set of crucial services.

A method for eliciting  
requirements for context-  
adaptive systems based on  
observing anonymous users in  
order to increase the  
representativeness of the  
requirements.

A case study on roles and communication structures in a software team in order to investigate potential improvements of collaborations driven by requirements.

A method for automatically constructing models in order to predict which feature requests are most likely to fail due to insufficient or inadequate upfront analysis.

An experience report on using traditional requirements engineering techniques, formal methods, and visual narratives to disambiguate natural language safety requirements of industrial standards.

A method for finding desirable design solutions as the requirements change by reusing parts of old solutions in order to minimize the effort required to implement new solutions.

A discussion on the joint usage of i\* goal models with other modeling frameworks in order to combine the advantages of goal-oriented RE with other paradigms



A discussion of the concepts of tracing across multiple disciplines in order to illustrate how existing practices in requirements tracing could be leveraged.

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An action research study on roadmapping problems of two software product companies in order to shift the focus of roadmapping from prioritization of software features to analysis and prioritization of customers' processes

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A set of four experiments with students on the impact of System Sequence Diagrams and System Operation Contracts in order to assess the quality of the system domain model

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A method for generating a set of obstacle conditions corresponding to exceptional conditions that may obstruct system goals in order to detect missing requirements.

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A method for reasoning with partial models that capture uncertainty coming from multiple open choices in early specification stages in order to support modeling when requirements are still to be clarified

A method for automating the construction of traceability links for architectural tactics in order to support software maintenance and preserve architectural qualities

A method for transforming security policies expressed in natural language to a formal, processable form in order to detect inconsistencies in access control policies

A method for conducting failure analysis of systems that consist of several interacting component in order to integrate FMEA and system modelling.

An experience report on challenges and potential solutions of a supplier company with respect to tender processes.

A template for systematically  
deriving requirements  
elicitation instructions in  
Application Engineering  
processes in order to elicit  
requirements more effectively

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A literature study on  
understanding the strengths  
and weaknesses of service  
description methods in order to  
allow developers selecting an  
appropriate description  
method that fits best their  
services

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A case study on planning the  
releases of an evolving  
software solution in the  
presence of low-quality input  
requirement in order to reduce  
release planning effort and  
increase decision-making  
flexibility

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A multi-case study on the use  
of goal-oriented requirements  
engineering techniques to  
improve traceability among  
enterprise architectures and  
business goals

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A study with practitioners,  
researchers and students  
based on an experiment and  
interviews for understanding in  
which context do common  
traceability visualization  
techniques fit better and what  
information to visualize

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A set of reusable queries for  
implementing a blueprint for  
traceability in safety-critical  
systems in order to comply  
with full life-cycle traceability  
as required by certification and  
regulatory agencies

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A modeling language for  
representing and analysing  
requirements for Self-Adaptive  
Systems in order to make them  
readable by non-engineering  
stakeholders

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A method for assessing the  
impact of changes in one  
requirement into other  
requirements in order to  
analyze the impact of  
requirement volatility on a  
project plan

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A literature study on the meaning of the word "creativity" in Social Sciences and Requirements Engineering in order to understand which kinds of creativity are relevant to a project and which creativity tools to use

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A case study on the awareness and handling of non-functional requirements among software architects, and their effect on IT project success

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An interview-based study with practitioners on how functional and non-functional requirement mismatches are handled in Open Source Software adoption projects

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A case study on a failed governmental IT project in order to understand the causes of failure from a requirements perspective

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A method for aligning and reconciling requirements from multiple jurisdictions (municipalities, provinces, nations) in order to reduce the number of requirements a company must comply with.

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A method for individual users to express privacy preferences, which are then used to reason about privacy for each user in different contexts.

An experience report on two requirements reuse strategies applied in one company in order to compare savings in reduced effort by reusing common requirements.

A solution for monitoring requirements in software systems by maintaining an instance of a state machine for each requirement in order to enable runtime monitoring and compensation capabilities

A field study on 62 applications of the Software Product Management Maturity Matrix that enables product managers to benchmark their organization in order to suggest improvements of the matrix.

A discussion of Requirements Composition Tables (RCTs), which structure an application's functionality by core features and crosscutting concerns in order to explain this concept to practitioners and discuss its benefits

A solution for comparing  
requirement sentences with  
domain-related documents in  
order to identify ambiguities in  
natural language requirements  
specifications.

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A solution for automatic  
detection of speculative  
language use in natural  
language requirements in  
order to identify and uncover  
uncertainty in requirements.

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A method for modeling  
regulations with a particular  
requirement specification  
language in order to help  
getting a more precise  
understanding of who complies  
with what.

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An experience report on  
categorizing requirements in  
large systems engineering  
projects in order to present  
practical issues with  
requirements categorization

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A method for detecting and  
classifying clarification events  
in online requirement  
discussions in order to  
highlight risks related to  
shared understanding.

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A method for relating security-relevant assets to requirements and objectives of an attacker in order to analyze system security in different situations and to enable a set of countermeasures to mitigate security threats.

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A study based on an online-survey on how product management practitioners understand the term product management in order to evolve product management frameworks and develop necessary skill sets for education of product managers.

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A case study on the selection of the most appropriate value-based requirements prioritization framework given the requirements of a particular company

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A method for quantitatively analyzing contribution relationship measures in goal models in order to support informed decisions about different solutions to requirements problems.

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An experiments with students  
for understanding when and  
why humans make correct and  
incorrect decisions during  
tracing tasks with the support  
of a trace matrix that  
visualizes progress

A method for scenario-based  
specifications of component  
interactions in order to find  
inconsistencies between  
specifications of many variants  
in product lines

An interview-based study with  
practitioners on how software  
architects deal with non-  
functional requirements in  
order to increase knowledge  
about the state of the practice.

A solution for mining "requires"  
or "excludes" constraints in the  
construction of feature models.

A solution for automatically  
detecting outdated  
requirements based on  
changes in the code in order to  
keep requirements  
specifications up-to-date

A method for managing and  
reducing requirements  
uncertainty by partial  
requirements models so that  
uncertainty can be made  
explicit and incrementally  
removed

An experience report on applying a visual requirements modeling language that mitigates some of the weaknesses of UML in describing requirements.

A method for predicting what areas of a proposed legal rule are most likely to evolve in order to allow engineers to begin building their software towards the more stable sections of the rule.

A solution for recommending trace links while creating or modifying traceable artifacts in order to avoid trace link creation towards the end of a project.

A discussion on view-based requirements specifications including challenges and research questions in order to better understand the particular information needs of downstream development roles.

A solution for extracting and ranking requirement candidates based on an analysis of web server logs in order to improve requirements elicitation and prioritization

A solution for identifying and resolving feature interactions at the level of requirements specifications in order to detect undesirable behavior earlier in the development life-cycle.

A modelling language for modelling the behavioural requirements of a software product line in order to ease the task of adding new features to a set of existing requirements.

A discussion on the state of the art in traceability, the grand challenge for traceability, and future directions for the field in order to increase the pervasiveness in industry.

A method for annotating goals and assessing obstacles with probability measures in order to increase requirements completeness.

A study based on review inspections and interviews with practitioners on the most critical and important quality criteria for natural language requirements specifications

An experiment for testing the hypothesis that adding a requirements analyst who is ignorant of the domain improves the effectiveness of the requirements elicitation team.

A solution for grouping generated trace link candidates in high-quality and low-quality clusters in order to improve the accuracy of automatic trace link recovery tools.

An experience report on how the use of RE methods in DNA nanotechnology contributes to make DNA nanotechnology more productive, predictable, and safe.

A multi-case study on how frequently do some classes of requirements appear in specifications for web-based enterprise systems

An interview-based study with practitioners for understanding the adjustment of requirement management practices after the adoption of open source software in order to facilitate open innovation

An experiment with students  
for assessing the effect of real-  
time machine translation on  
multilingual terms in order to  
leverage communication power  
in globally-distributed,  
multilingual project meetings

A set of two experiments with  
students and practitioners for  
investigating whether the  
granularity and cognitive  
support of prioritization  
techniques affect the  
judgement of product features  
as essential

A data-driven study on  
analysing the data collected  
via data mining from a  
commercial game over a three-  
year period in order to provide  
recommendations for future  
development.

A method for supporting  
adaptation to non-functional  
manifestations of uncertainty  
in order to optimize the  
system's ability to meet its  
non-functional requirements

A method for finding the root  
causes of the non-realizability  
of a scenario-based system  
specification in order to detect  
conflicts in the specification

A case study on the impact of  
issue report misclassification  
(between feature and bug) in \_\_\_\_\_  
order to improve bug  
prediction

A multi-case study on how  
information flows between  
different human roles in  
software projects with  
contrasting distributions of \_\_\_\_\_  
domain knowledge and  
different communication  
structures.

A method for synthesising  
response time requirements of  
component services in order to  
guarantee the global response \_\_\_\_\_  
time requirement of a service  
composition

A framework for supporting the  
selective disclosure of personal  
information according to  
context information (time,  
location, ...) gathered at \_\_\_\_\_  
runtime in order to  
continuously satisfy privacy  
requirements

An experiment with students to  
understand how requirements  
analysts seek and gather  
information when linking \_\_\_\_\_  
requirements to other software  
artifacts

A method for analysing large  
sets of user feedback in order  
to extract new/changed  
requirements for next versions

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A method for automatically  
deriving a machine  
specification satisfying a set of  
goals in a domain in order to  
reducing requirement  
modeling effort

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A method for automatically  
extracting a feature model  
from publicly available natural  
language product descriptions  
in order to speed up such  
feature model extraction  
process

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A method for transforming an  
under-specified visual design  
mockup drawn by the designer  
to an accurate and flexible web  
page with virtually no manual  
effort

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A method for recovering  
traceability links between  
software artifacts that can be  
configured at runtime in order  
to optimize trace quality

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A technique for both analyzing specifications of a product line to ensure that it is realizable and automatically synthesizing software components that show which sequences of actions the system can do to implement the specification

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A study based on practitioner interviews and project data to create a framework to assess requirement-ambiguity risk in order to understand the relationship between requirement ambiguity and project success

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A case study for evaluating the suitability of a new software release planning (SRP) process in order to improve and customize SRP in practice.

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A method for identifying relevant groups of stakeholders in order to to enable facilitated decision-making and handling of requirements

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A case study on understanding software product management challenges in order to understand how the evolving management style has affected the way product requirements are managed

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A case study for analysing the emergence of mutual and shared understanding in the written communication of a multidisciplinary team in order to support effective collaboration

An interview-based study with practitioners for understanding what traceability usage scenarios are most relevant for practitioners in order to provide a better traceability support.

A method for grouping similar requirements in order to ease and allow a proper understanding of a requirements document.

A method for selecting a regulatory compliance solution that best suits the stakeholder preferences.

A literature study for understanding how the distance between RE and other development activities affect coordination and alignment to meet customer needs

A case study for understanding the challenges of use case and requirements analysis in a low-tech rural environment

A method for automatically finding ambiguities in RE documents in order to avoid the need for manual checks

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A method for architecting systems that contain requirements with consequences over the software architecture in order to ensure the architecture meets the requirements

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A document-driven study for analysing RE-related job advertisements in order to determine how practitioners perceive and staff requirements engineers.

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An experiment with students for comparing two requirements elicitation approaches when instantiating a Software Product Line (SPL) in order to understand which approach is more suitable for eliciting requirements when using SPLs.

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A method for eliciting and modeling requirements for motion-based games for physiotherapy in order to guide the patients in performing the right movements for their rehabilitation

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A method for supporting  
decision making for self  
adaptive systems in order to  
deal with uncertainty at  
runtime

A method for modelling i\*  
elements in UML in order to  
enable the usage of existing  
UML tools for i\*

A method for gathering  
feedback before a user has  
had experience with a software  
system in order to reduce the  
mismatch between actual and  
predicted user satisfaction

An interview-based study with  
practitioners for understanding  
how software architects cope  
with quality requirements in  
the context of large software  
system projects

A method for expressing legal  
requirements in order to  
overcome significant  
challenges in managing the  
many laws that govern their  
systems in a multi-  
jurisdictional environment

An interview-based study with  
practitioners on requirements  
traceability across  
organizational boundaries in  
order to identify current needs  
and challenges.

A case study for analyzing whether requirements with related information spread over many sections of many documents can be automatically classified

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A case study for understanding the root causes of failed software projects in order to identify risk areas and provide practical guidance to practitioners

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A case study on requirements brainstorming sessions considering knowledge of the domain as the factor to be measured in order to assess the effectiveness of idea generation

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A method for identifying unstated assumptions in composite service-oriented applications in order to decrease the risk of unexpected behavior

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A literature survey on requirements elicitation techniques and a roadmap of research in order to improve the elicitation of tacit knowledge

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A method for predicting  
integration bugs based on  
network measures calculated  
over requirements dependency  
networks

An interview-based study on  
requirements elicitation  
techniques used by cloud  
providers in order to clarify  
challenges related to  
requirements elicitation posed  
by the cloud paradigm

A method for refactoring new  
and inconsistent terminology in  
requirements in order to  
enhance the practicality of  
automated tracing tools.

An experience report on the  
development of three  
generations of a product in  
order to assess the positive  
effects of well-written and well-  
reviewed requirements on the  
quality of the final product

A method for designing RE  
visual notations based on large  
groups of novices instead of  
small groups of experts in  
order to increase novice's  
ability to interpret RE notations  
correctly.

A solution for formally checking incomplete high-level specifications against formally specified requirements in order to integrate formal verification with agile approaches.

A method for automatic extraction of glossary terms from natural language requirements

A case study on feature interactions in an automotive software system in order to assess the extent, awareness, and importance of interactions between features

A solution for leveraging a knowledge base of domain concepts and their relationships for fully automated creation of traceability links in order to increase precision and recall

A method for systematically inspecting requirements specifications in order to increase their quality

A data-driven study on user feedback in app stores investigating how and when users provide feedback, the content of that feedback, and the impact of the feedback on the user community.

An experience report on the requirements engineering process for a national Police Force Crime Records Management System in order to present key challenges

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A method for analyzing the structured relationships between requirements in order to validate requirements for completeness, correctness, and consistency.

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A method for extracting a set of independent components from requirements descriptions in goal models in order to help analyzing the impact of requirements changes in the source code

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A method for eliciting requirements for new telemedicine applications in a collaborative setting of time-constrained medical practitioners and requirements engineers in order to ensure compliance with medical protocols

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A method for translating IT regulations into a legal requirements coverage model used to make coverage assertions about existing or planned IT systems in order to help developers identifying relevant legal requirements

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A method for decomposing and structuring the behavioural requirements of a feature based on modes of operation (e.g., Active, Inactive, Failed) in order to provide a generic behavioural interface for features.

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A study based on an online-survey on the ability of software engineers to understand the impact of cross-references in legal regulation texts over their software systems.

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An experience report on the use of domain analysis to characterize current practice of applying requirement-based test generation at one industry partner in order to enhance the reuse of test artifacts across different products.

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A solution for generating trace links between textual requirements artifacts based on machine learning in order to improve automatic link recovery techniques.

An experience report on factors that affect when having solution information in requirements is sensible and when it should be avoided in order to increase the understanding of practitioners.

An experience report on the integration of software architecting and decision-making methods in order to select a common service oriented architecture tool that could satisfy the needs of different business units.

A method for using defect taxonomies in order to improve requirements reviews and testing.

A method for metric-based prediction of requirements that are likely to evolve in order to narrow the scope of change analysis to a small set of requirements.

A solution for automatically mapping newly defined system requirements to corresponding system components in order to prevent requirements inconsistencies and help identify further necessary requirements.

A method for mapping natural language policy requirements to a formal representation in order to to reason about conflicting requirements within a single policy and among multiple policies in a data supply chain.

A discussion on the major challenges of reviewing requirements specifications in industry in order to align research activities to add more value for the software industry.

A literature review on visual requirements analytics, a field that aims at increased interactivity of requirements visualization in order to lead to actionable decisions

A multi-case study on the readability of policy documents for requirements engineers and assessing if automated text mining can indicate whether a policy document contains requirements

An interview-based study with practitioners on the quality and suitability of a project's traceability strategy in order to identify common problems across traceability strategies and their possible causes.

A data-driven study on requirements artifacts and processes in open source systems, where classical software engineering is not employed in order to identify risks of development failures and consequences for system quality.

A project-based study with students on a semi-automatic tool to capture implicit traceability links from requirements to code in order to evaluate the feasibility and practicability.

A case study for validating a tool that automatically checks the conformance of requirements to a given template in order to reduce ambiguity in natural language requirements

An experiment with students  
for investigating the  
relationship between time  
pressure and efficiency in test  
case development and  
requirement review

A method for self-adapting the  
architecture of a software  
system to the changing  
requirements and contexts at  
runtime in order to improve  
effectiveness and flexibility of  
adaptation

A method for extracting a  
model showing traces between  
software artifacts and  
analysing this model to identify  
areas of traceability failure

An online survey with  
practitioners and academics on  
how users and developers from  
various geographical locations  
perceive privacy and which  
concrete measures would  
mitigate their privacy concerns

A method for extracting and  
refining privacy requirements  
for mobile applications from  
raw data gathered through  
empirical studies involving end  
users

A method for describing uncertainty about the impact of design alternatives on stakeholders' goals and calculate the consequences of such uncertainty

An experiment with students on the effects of present customer desires as requirements or as ideas on design creativity

A method for deriving structured requirements models in the form of process diagrams and ontologies from textual use case requirements

A case study on the use of issue tickets generated by stakeholders' requests to track requirements evolution for a large-scale system

A framework for allowing requirements engineers and non-technical stakeholders to perform model checking during elicitation, analysis and verification of system requirements

An experience report for presenting and comparing examples of various approaches to teaching RE in order to inspire instructors to seek additional learning approaches.

A online survey with  
researchers and academics for  
identifying benefits, domain  
areas, and challenges for social  
adaptation.

A method for systematically  
managing obstacles and  
refining compliance goals in  
order to support the  
elaboration of compliance  
requirements.

A method for detecting  
inconsistencies in temporal  
constraints in order to verify  
the consistency of temporal  
requirements

A model for capturing and  
representing traceability in  
order to provide safety  
evidence on safety-critical  
systems

A method for comparing the  
results of multiple priority-  
based decision heuristics in  
order to identify the best  
heuristics for deciding which  
requirements should be  
refined/elaborated first.

A method for weaving the  
feedback from the runtime  
system into requirements  
documents in order to keep  
development time and runtime  
requirement models consistent

An experiment with students  
for exploring the effect of  
collaborative interactions  
between clients and analysts in  
the process of requirements  
validation.

An experience report for  
identifying understandability  
issues of formal specifications  
and providing writing style  
guidelines in order to make  
formal specifications  
understandable.

A method for acquiring,  
modeling and analyzing  
regulatory requirements in  
order to conform to regulations  
on safety-critical system.

An interview-based study for  
understanding current  
practices of user-developer  
communication in IT projects in  
order to identify issues and  
enhance user-developer  
communication.

An online survey with  
practitioners for identifying  
causal relationships between  
requirements elicitation issues  
and project performance in  
order to strengthen the  
execution of RE activities and  
reduce risk on project  
performance

An interview-based study with practitioners for understanding how the game industry applies RE in practice

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A method for identifying unwanted interaction between requirements in order to address the diverse interests of different stakeholders in a coherent way

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A case study for comparing different approaches to categorization of natural language requirements in order to understand the best way to achieve effective communication and prioritization

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A method for transforming requirements for service-based systems to QoS-aware choreography specification in order to deliver more adaptive software systems

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A method for measuring and improving the completeness of natural language requirements with respect to the input documents in order to include all the relevant information from these documents

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A literature study for identifying and categorizing research in self-adaptive systems requirements modeling and analysis

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A method for resolving exceptional conditions that may obstruct the behavioral goals of the target system in order to progress towards a more complete model of stakeholder goals.

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An experience report on the adoption of a persona-centric requirements framework in order to show its ability to quantify user experience.

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A case study on collaboration networks between small and medium-sized software companies in order to investigate the impact to software product management and requirements engineering practices.

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A case study on a protocol for deriving functional safety requirements from Fault Tree Analysis results in order to increase the safety of critical systems.

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A case study on requirements engineering in open commercial development models describing the flow of product requirements information through the ecosystem

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A method for specifying and validating feature-oriented requirement models in order to avoid behavioral inconsistencies between features.

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A method for finding suitable trade-offs and priorities when complying with multiple regulations while at the same time trying to meet business objectives.

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A solution for automatically filtering, aggregating, and analyzing user reviews to systematically analyze user opinions about single features

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A case study on the transformation of a set of natural language functional requirements to a semi-formal pattern notation in order to investigate the applicability of this process in the automotive domain.

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A method for representing requirements and conflicts as a jigsaw puzzle in stakeholder meetings in order to improve commitment of stakeholders in co-authoring of requirements and co-responsibility in conflict handling

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A solution for automatically detecting cross references in legal documents and linking them to the target provisions in order to improve the elaboration of compliance requirements.

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A method for requirements discovery for health care systems in order to increase the acceptance by the target user community.

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A method for selecting the most appropriate security requirements pattern in order to decrease the time spent in the requirements elicitation process and improve the quality of the product.

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An interview-based study on how game developers reason about gameplay requirements and handle them in their projects in order to improve the elicitation and validation of gameplay requirements.

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A method for requirements elicitation based on interactions of autonomous parties and the participants' social relationships in order to improve the requirements engineering for sociotechnical systems

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An experience report on the use of a method for discovering customer requirements to configure an off-the-shelf software package.

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A solution for automatically identifying security-relevant sentences in natural language requirements and translating them into functional security requirements in order to strengthen the overall security of the system.

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A method for estimating the size of an application previous to its requirements specification by using the application language itself, captured by a lexicon in order to get estimations earlier.

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A solution for extracting familiar ideas from the documented requirements and stakeholders' comments and automatically obtaining unfamiliar idea combinations in order to generate innovative requirements.

An interview-based study on how practitioners understand, capture, and use business rules in order to describe constraints in a domain.

A case study on the requirement elicitation for a recommender system that supports therapists in selecting motion-based video games to treat patients with brain injuries.

A method for eliciting quality-impact relationships and using them to specify quality requirements in order to achieve good-enough quality.

A method for visualizing how IT impacts are linked to business value, and how much and when value is realised in order to evaluate IT business value on a company level.

An experience report on a system provider/sub-contractor collaboration centered around design-level requirements in order to report lessons learned regarding requirements representations, requirements tools, and cooperation process.

A solution for combining adaptation decisions based on goals with past experiences of successful adaptations in order to improve adaptation effectiveness and overall system quality.

A method for analyzing goal satisfaction resulting from resolved uncertainty in order to support early requirements decision-making in the presence of uncertainty.

A solution for exploiting the information contained in previously defined trace links in order to facilitate the creation and ongoing maintenance of trace links as the requirements evolve.

A method for assessing the quality of RE processes and artifacts in a company in order to identify issues and potential improvements

An experience report on using goal modelling to incorporate sustainability into the procurement system of a large multinational energy company in order to evaluate the suitability of the technique for such a purpose

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A method for detecting vulnerabilities in requirements of long-living software systems based on reported security incidents in order to keep long-living systems "up-to-date" with respect to security.

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An experience report on applying a combination of RE methods to elicit performance requirements in an existing system from the process automation domain in order to improve performance testing.

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A study based on experiments with crowd workers on extracting requirements from natural language text sources by untrained workers in order to evaluate the cost and quality of crowdsourcing RE tasks.

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A data-driven study on the use of a requirements inspection methodology in more than 140 projects in order to discover correlations between requirements specification quality and project costs or product quality.

A method for identifying ambiguity in legal texts in order to prevent software engineers from implementing software that does not comply with the regulations.

A modeling language for defining non-functional requirements (NFRs) based on the fulfillment of other requirements in order to specify unambiguous, de-idealized, and measurable NFRs.

A method for capturing the uncertainty of feature evolution in feature models in order to decide which features to implement next.

A method for locating where software should be refactored and which refactorings should be applied in order to fulfil unsatisfied stakeholder goals.



A solution for writing or speaking trace queries in natural language in order to lower the barrier for utilizing trace data.

An experience report on representing and reusing product knowledge for product customization in order to identify requirements for product variants.

A solution for automatic extraction and modeling of quality concerns from textual documents such as requirements, feature requests, and online forums in order to elicit quality requirements

A case study on the use of a tool for specifying requirements based on two types of knowledge-reuse artifacts in order to evaluate the effects on requirements ambiguity and inconsistency.

An experience report on eliciting user requirements with a non-standard user population: visually impaired users.

A solution for identifying violations of security requirements that may be caused by topological changes of the environment and selecting security controls that prevent such violations.

An online survey on the ability of laypersons, technical professionals, and legal experts to judge the similarity between legal coverage conditions and requirements.

An experiment with students for determining whether practicing mindfulness for four weeks enhances conceptual modelling skills in order to improve professional performance of software engineers

An interview-based study with practitioners for understanding how software architects working on large, distributed projects are involved in engineering quality requirements.

An online survey with practitioners and academics for validating the acceptance and impact of an approach based on artifacts and scenarios

A case study for validating a technique for clustering keywords extracted from natural-language requirements in order to support the automatic construction of project glossaries

A case study for including quality requirements in a software release planning technique in order to demonstrate the benefits in terms of release time and product scope

An experience report on the use of a lean methodology to identify security requirements in order to integrate them in the software production cycle

An experiment with students for assessing a technique that automatically suggests appropriate security requirements templates implied by existing functional requirements

A method for the efficient model-based verification of product line requirements in order to detect and correct requirement errors early.

A method for automatically extracting goal and use case models from natural language requirements documents in order to support further analysis of the extracted models.

A case study for identifying metrics that evaluate feature models in order to quantify the success of feature models in practice.

A method for transforming informal requirements into formal ones in order to reduce requirements defects.

An industrial study using interviews and surveys for investigating the design of Digital Addiction labels in order to meet ethical and professional requirements.

A workshop-based industrial study on the usability of user stories in order to embed human values in the requirements engineering process.

A set of metrics for assessing and quantifying requirement relations in agile development in order to estimate implementation risk of requirements.

A case study on the customer challenges and demands on requirements engineering processes in order to bring the customer perspective into outsourced projects.

An industrial study using experiments and focus groups for understanding whether the use of catalogs of threats and security controls affects the actual and perceived effectiveness of a security risk assessment method.

A literature study for identifying and categorizing prioritization criteria in order to customize prioritization criteria to a particular project situation.

A case study for evaluating a particular approach to release planning in order to reach the market as early as possible with a competitive level of quality.

A method for analyzing and enforcing security mechanisms on system requirements in order to precisely capture the impact of security in the system.

A method for integrating  
several types of contextual  
information into a  
diagrammatic representation  
in order to improve the  
validation of functional safety  
requirements.

An experiment with students  
for assessing an existing  
availability risk assessment  
method in order to improve its  
reliability.

A method for the mutual  
adjustment of conflicting  
requirements between  
business and IT perspectives in  
order to get seamless  
alignment between these two  
perspectives.

A method for modeling and  
reasoning about information  
quality at requirements level in  
order to avoid low-quality  
information for critical  
systems.

A method for semi-  
automatically translating  
natural language requirements  
into a formal language in order  
to validate natural language  
requirements

A method for consolidating behavioral requirements and functional design in order to avoid behavioral requirements of the system become outdated.

An interview-based study with practitioners for understanding how practitioners in various roles use requirements artifacts in order to support better requirements communication.

A method for integrating user feedback involving geographically dispersed stakeholders in order to facilitate forum-based requirements elicitation.

An experiment with practitioners and students on generating creative ideas and requirements in creativity workshops in order to evaluate the effectiveness of different creativity techniques.

A method for managing uncertainty about estimates of likelihoods of obstacles to goal satisfaction in order to facilitate risk-based methods for RE.

A method for analyzing feature life cycles in app stores in order to help app developers identify trends and find undiscovered requirements.

An experience report on practical realities an organization faces in attempting to reuse requirements, including a requirements reuse process, encountered problems, obtained results, and plans for future improvement of the process.

A solution for checking 14 quality criteria in user stories that user story writers should strive to conform to in order to turn raw user stories into higher-quality ones.

A method for analyzing privacy properties in service-oriented architectures based on a data flow model in order to reduce privacy and security risks when integrating third-party services.

A method for semi-automatically exposing whether the unanticipated behavior of the operational context can result in undesired system states.



A study based on an online-survey on how changes to security requirements affect analysts' risk perceptions in order to understand how the analysts perceive risks in composed systems.

A literature study for identifying dependent variables used in experimental requirements engineering research.

A model for monitoring the compliance of a System of Systems (SoS) with its requirements at runtime.

A data-driven study for comparing several probabilistic techniques to classify app reviews from app stores in order to assess their accuracy.

A document-driven study for understanding and classifying ambiguity occurring in customer-analyst interviews in order to improve the use of interviews during requirements elicitation.

A method for acquiring the knowledge of various stakeholders along multiple dimensions of problem space and design space in order to elicit the users' requirements in self-adaptive systems.

An interview-based study for identifying categories of probing questions in order to prompt business analysts to elicit architecturally significant functional requirements.

A solution for specifying preferences over goals through natural language statements in order to the comparison of alternatives during the specification process.

An interview-based study with practitioners on the flow of requirements in the process of automotive software development and strategies to refine requirements iteratively throughout their life-cycle.

A method for inferring the test status of requirements based on the test status of structurally related requirements in order to better assess the quality of the system.

A solution for determining the quality of trace links and detecting unacceptable deviations in order to support the systematic assessment of a project's traceability.

An experience report on challenges in creating testable experience requirement for entertainment applications (e.g., games).

A case study for investigating which changes requirements engineers perform on use cases over time and which of them are more problematic in difficulty or risk in order to understand the maintainability of use cases.

A solution for calculating how likely a natural-language requirement statement is to be impacted by a change in order to automatically analyze how a change to one requirement impacts other ones.

A method for eliciting a model of all operational states of a system in order to ease the specification of features based on these operational states.

A method for capturing inconsistencies between stakeholders' goals and beliefs and resolving goal conflicts.

A case study on prototyping in an agile RE project in order to examine the potential to solve the challenges of agile RE, especially the lack of documentation, the motivation for RE work, and poor quality communication.

A document-driven study in the industry on the use of passive voice and weak words in requirements showing that passive voice is almost never problematic.

An experiment with students and practitioners on the use of a mobile tool for model-based sketching of free-form diagrams allowing for the definition and reuse of diagramming notations on the fly in order to assess the usefulness of the tool.

A solution for automatically extracting and tracking non-functional requirements from the textual content of requirements specifications.

An experience report on a failed project in which the customer eventually decided to take over the development themselves in order to investigate requirements-related root causes for such decision.

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A set of two empirical studies (online survey to practitioners and experiment with students) on the creation and use of software requirement specifications in companies and the impact of their quality in subsequent development activities.

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A case study on the effectiveness of a particular method to visually represent requirements evolution histories.

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A document-driven study on the differences between documented non-functional and functional requirements in industrial requirements specifications in order to assess how sharp this distinction is in practice.

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An interview-based study on reusable probing questions used to gather information for architectural decision-making in order to equip business analysts with these questions.

A method to automatically revise goals that may be underspecified or partially wrong to resolve obstructions in a given domain.

A method to discover security requirements in continuously evolving threat landscapes which lead to new tacit knowledge that is embedded in or across a variety of security incidents.

An interview-based study to explore requirements engineering practitioners' perceptions and attitudes towards sustainability.

An experience report on teaching requirements engineering for undergraduate students.

A method for automatically identifying the impact of requirements changes to system design using SysML.

An experiment with students  
for analyzing different software  
engineering tasks that affect \_\_\_\_\_  
the tracing of the same  
requirement.

A specification language for  
modeling both rich  
configurations and expressive  
temporal properties in order to \_\_\_\_\_  
make formal verification of  
systems involving these  
properties.

A method for automatically  
decomposing on-the-fly formal  
specifications and verify them  
seamlessly in order to support \_\_\_\_\_  
industrial-scale applicability of  
formal verification techniques.

A method for runtime self-  
adaptation ensuring the  
satisfaction of multiple goals  
while simultaneously reaching \_\_\_\_\_  
optimality to an additional goal  
and achieving robustness to  
environmental disturbances.

A method for on-line analysis  
of formal specifications able to  
cope efficiently with the  
evolution of such specifications \_\_\_\_\_  
in order to support adoption of  
such techniques in industrial  
contexts.

A method for mining performance specifications from running systems that allow performance regression testing and performance monitoring.

A method for deciding the plan for the next software release considering the risk of different perceptions of value and different revenues associated with multiple (groups of) stakeholders.

A method for integrating goal-oriented requirements engineering and multi-criteria decision making for problem modeling and analysis.

A data-driven study on the performance of a set of information retrieval algorithms for computing traceability in issue tracking systems.

A case study on understanding how stakeholder influence and collaboration patterns evolve over time and how innovation and time-to-market evolve over the same period of time.



A multi-experiment with students for comparing the accuracy and performance of different query representation techniques in order to improve the ability to provide critical feedback to users making queries.

A method for searching certain classes of potential problems in business process models related to their incompleteness of the ambiguity of their labels.

A method for classifying automatically legal cross references across several provisions which refer to a single compliance requirement.

A case study on measuring the frequency of eight types of requirements defects (e.g., incompleteness) and refining them according to nine possible defect sources (e.g., wording).

A model for relating gamification, stakeholder engagement and RE performance in agile processes in order to increase stakeholder engagement adequately in each RE phase.

A data-driven study for uncovering detailed relations between requirements and design decisions and demonstrate the effectiveness of a particular documentation approach for decision-related knowledge.

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A multi-instrument study (survey followed by interviews) with industry on their productivity and the quality of their working documents when using user stories.

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A literature review on reported evidence on customer input during continuous deployment in software engineering, including potential benefits, challenges, methods, and tools.

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A literature study on specific threats to validity in controlled experiments with student participants and on mitigation strategies for these threats.

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A conceptual framework for integrating lean principles within design science research phases and outputs exemplified with the planning and execution of software and requirements engineering research projects

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An experiment with students on comparing through eye tracking the way specifications are read depending on their presentation format and considering different role perspectives.

A case study for assessing the impact of a real legal change proposal on an existing specification model using model-based simulation techniques.

A process for putting together agile development, DevOps, and innovation management in order to embed technological innovations into the overall system.

A state of the art report on the status quo, challenges, findings and possible directions in RE for health data analytics.

A method for revising software requirements specifications (SRS) through inspection at two different levels of abstraction in order to assess the SRS quality.

A study based on interviews with practitioners and a literature review for building a body of knowledge for traceability in order to assist engineers how to implement traceability in a project.

An experience report on the process followed to elicit, classify, prioritize, and validate privacy requirements for a privacy platform involving public administration and citizens.

A case study for understanding how experts can elicit security demands from stakeholders of the application domain and derive security policy templates.

A training program for assisting requirement authors through a network of trained experts in the context of large projects with dozens of such authors.

An ontology for describing properties of data and systems that allow to generate and manage privacy requirements in order to integrate the legal and engineering perspectives.

An experience report on applying a tailored INCOSE requirements engineering process to the specificities of retrofittable subsea equipment systems.

A multi-case study with practitioners on the lessons learned using a set of templates for requirements written in natural language during six years.

A method for specifying changes in intentions over time and simulating such changes in order to make trade-off decisions about the evolution of requirements.

An online survey on the ability of laypersons, technical professionals, and legal experts to judge the similarity between legal coverage conditions and requirements.

An interview-based study with practitioners for identifying a set of cues appearing in linguistic expressions that typically lead to ambiguity in order to improve customer-analyst communication.

A study based on case studies and interviews with practitioners for identifying challenges involved in collaborative traceability management and how traceability can be used to enable collaboration.

A process for automatically discovering requirements knowledge from large sets of domain documents in order to assist organizations in entering new domains.

A framework for helping analysts in identifying system misuse cases using formal reasoning about social norms in order to avoid data breaches originating from such misuses.

A framework for specifying performance requirements based on sentence patterns in order to reduce their level of incompleteness.

A tool for connecting textual notes and video recording when holding requirements elicitation workshops supporting enhanced analysis in order to mitigate the scribe's overload.

A literature review on the existing approaches in goal-oriented RE in order to provide research directions in this area.

An experiment with students for validating that modeling separately the stakeholder viewpoints and then explicitly merging them leads to a richer domain understanding than constructing a single coherent requirements model.

An interview-based study with practitioners for knowing the current practices of presenting and manipulating artifacts in documentation tools in order to understand how well these tools support requirements engineers.

An experiment with academics for exploring the impact of violating goal model layout guidelines onto the understandability of the requirements represented in such model.

A data-driven study for understanding the communication about software applications on Twitter and its relevance for RE and software evolution.

A method for eliciting security requirements related to the acquisition of information about the system by methods that deeply include non-technical means.

An interview-based study with practitioners on the current practices for writing, maintaining and linking requirements and acceptance test documentation in agile projects.

An analysis of the adequacy of different natural language processing techniques and machine learning features for identifying software feature requests in issue tracking systems.

A model for understanding the implications of privacy requirements vagueness in aligning company's privacy policies with their data practices in order to reduce privacy risks.

A literature review on the existing approaches in the visualization techniques available in RE.



A case study on generating and rating ideas from the crowd in order to understand how human personality and creative potential influence requirement acquisition from the crowd.

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A method for automatically deriving conceptual data models from user stories written in natural language in order to create a holistic view of the requirements specification,

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A method for enlarging traditional traceability approaches with information linking documents generated during traditional and agile methodologies in order to ease the transition to agile development.

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A case study on the need for requirement change control policies and formal processes to coexist with informal requirement change management in globally distributed settings.

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A taxonomy for classifying requirement errors and for guiding developers to find additional faults based on the type of usual human errors in order to avoid requirement engineers to make the same errors in the future.

A data-driven study for understanding the effect of size and layout flaws in the comprehension of several types of UML specification models.

An experiment with students for investigating reading patterns and learning styles of software requirement inspectors for in order to enhance inspection team outcome.

A framework for supporting a systematic and comprehensive discovery of security goals for a system.

**Suppose that you could provide guidance to a team of requirements engineering researchers. What topics / problems should they focus on first to support you in your primary work area?**

Thank you very much for your responses so far. For our study, it is also important to see whether the relevance of chosen work and topics might depend on the particularities of your background. Therefore, you will find now some concluding questions on your background. Please keep in mind, that your answers will remain anonymous.

### **Which of the following roles describes your primary working area best?**

- ☐ Requirements Engineer
- ☐ Business Analyst
- ☐ Architect
- ☐ Tester / Test Manager
- ☐ Developer
- ☐ Project Manager
- ☐ Product Owner
- ☐ Designer
- ☐ Other (please specify)

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### **How many years are you working in your primary working area?**

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### **To which extent do you actively engage in requirements engineering?**

- ☐ I am responsible for requirements engineering activities.
- ☐ I am contributing to requirements engineering activities.
- ☐ For my tasks, I use requirements.
- ☐ I do not work with requirements at all.

**Do you have a degree in Computer Science or a related field (such as computer engineering or information systems)?**

☐ Yes

☐ No

**What is the size of your team?**

☐ Small (1-4)

☐ Medium (5-10)

☐ Larger (10-49)

☐ Very large (50+)

**What class of systems is in scope of your project(s)?**

☐ Software-intensive embedded systems

☐ (Business) information systems

☐ Hybrid / mix of embedded systems and information systems

☐ Other (please specify)

**What is the industry sector in which you are most frequently involved?**

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**In which country are you located?**

☐ -- Please make a Selection --

☐ Afghanistan

☐ Albania

☐ Algeria

☐ Andorra

☐ Angola

☐ Antigua & Deps

☐ Argentina

☐ Armenia

☐ Australia

☐ Austria

☐ Azerbaijan

☐ Bahamas

☐ Bahrain

☐ Bangladesh

☐ Barbados

☐ Belarus

☐ Belgium

☐ Belize

☐ Benin

☐ Bhutan

☐ Bolivia

☐ Bosnia Herzegovina

☐ Botswana

☐ Brazil

☐ Brunei

☐ Bulgaria

☐ Burkina

☐ Burundi

☐ Cambodia

☐ Cameroon

☐ Canada

☐ Cape Verde

☐ Central African Rep

☐ Chad

☐ Chile

☐ China

☐ Colombia

- ☐ Comoros
- ☐ Congo
- ☐ Congo {Democratic Rep}
- ☐ Costa Rica
- ☐ Croatia
- ☐ Cuba
- ☐ Cyprus
- ☐ Czech Republic
- ☐ Denmark
- ☐ Djibouti
- ☐ Dominica
- ☐ Dominican Republic
- ☐ East Timor
- ☐ Ecuador
- ☐ Egypt
- ☐ El Salvador
- ☐ Equatorial Guinea
- ☐ Eritrea
- ☐ Estonia
- ☐ Ethiopia
- ☐ Fiji
- ☐ Finland
- ☐ France
- ☐ Gabon
- ☐ Gambia
- ☐ Georgia
- ☐ Germany
- ☐ Ghana
- ☐ Greece
- ☐ Grenada
- ☐ Guatemala

- ☐ Guinea
- ☐ Guinea-Bissau
- ☐ Guyana
- ☐ Haiti
- ☐ Honduras
- ☐ Hungary
- ☐ Iceland
- ☐ India
- ☐ Indonesia
- ☐ Iran
- ☐ Iraq
- ☐ Ireland {Republic}
- ☐ Israel
- ☐ Italy
- ☐ Ivory Coast
- ☐ Jamaica
- ☐ Japan
- ☐ Jordan
- ☐ Kazakhstan
- ☐ Kenya
- ☐ Kiribati
- ☐ Korea North
- ☐ Korea South
- ☐ Kosovo
- ☐ Kuwait
- ☐ Kyrgyzstan
- ☐ Laos
- ☐ Latvia
- ☐ Lebanon
- ☐ Lesotho
- ☐ Liberia

- ☐ Libya
- ☐ Liechtenstein
- ☐ Lithuania
- ☐ Luxembourg
- ☐ Macedonia
- ☐ Madagascar
- ☐ Malawi
- ☐ Malaysia
- ☐ Maldives
- ☐ Mali
- ☐ Malta
- ☐ Marshall Islands
- ☐ Mauritania
- ☐ Mauritius
- ☐ Mexico
- ☐ Micronesia
- ☐ Moldova
- ☐ Monaco
- ☐ Mongolia
- ☐ Montenegro
- ☐ Morocco
- ☐ Mozambique
- ☐ Myanmar, {Burma}
- ☐ Namibia
- ☐ Nauru
- ☐ Nepal
- ☐ Netherlands
- ☐ New Zealand
- ☐ Nicaragua
- ☐ Niger
- ☐ Nigeria



- ☐ Norway
- ☐ Oman
- ☐ Pakistan
- ☐ Palau
- ☐ Panama
- ☐ Papua New Guinea
- ☐ Paraguay
- ☐ Peru
- ☐ Philippines
- ☐ Poland
- ☐ Portugal
- ☐ Qatar
- ☐ Romania
- ☐ Russian Federation
- ☐ Rwanda
- ☐ St Kitts & Nevis
- ☐ St Lucia
- ☐ Saint Vincent & the Grenadines
- ☐ Samoa
- ☐ San Marino
- ☐ Sao Tome & Principe
- ☐ Saudi Arabia
- ☐ Senegal
- ☐ Serbia
- ☐ Seychelles
- ☐ Sierra Leone
- ☐ Singapore
- ☐ Slovakia
- ☐ Slovenia
- ☐ Solomon Islands
- ☐ Somalia

☐ South Africa

☐ South Sudan

☐ Spain

☐ Sri Lanka

☐ Sudan

☐ Suriname

☐ Swaziland

☐ Sweden

☐ Switzerland

☐ Syria

☐ Taiwan

☐ Tajikistan

☐ Tanzania

☐ Thailand

☐ Togo

☐ Tonga

☐ Trinidad & Tobago

☐ Tunisia

☐ Turkey

☐ Turkmenistan

☐ Tuvalu

☐ Uganda

☐ Ukraine

☐ United Arab Emirates

☐ United Kingdom

☐ United States

☐ Uruguay

☐ Uzbekistan

☐ Vanuatu

☐ Vatican City

☐ Venezuela

☐ Vietnam

☐ Yemen

☐ Zambia

☐ Zimbabwe

**In case you are interested in the survey results, enter your e-mail address here.**

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**Would you be willing to support us in a short follow-up interview?**

☐ Yes

☐ No

**Is there any other unaddressed aspect that you would like to share with us?**

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Dear Participant,

Thank you very much for participating in the survey!

The results to the study will be made available as soon as possible.

Best regards,

Daniel Méndez