How to Write a Great Thesis?

Best (and worst) practices from choosing a topic to handing in

Dr. Roman Haas

With material from Dr. Elmar Juergens

In close cooperation with the Academic Advisors at TUM Computer Science

2011 – 2017

2017 – now

CQSE

Research collaboration
with Prof. Pretschner

Agenda

1. Why?
2. What‘s important?
3. Choosing a topic
4. Doing the work
5. Presentation

thesisguide.org

- Slides
- Video
- Detailed Essays
- FAQ

Agenda

1. Why?
2. What‘s important?
3. Choosing a topic
4. Doing the work
5. Presentation

Refactoring Suggestions for Long Methods

```
public void writeComment(final DatenDownload datenDownload) {
    if (datenDownload.film == null) {
        // kann bei EinmalDownloads nach einem Neuladen der Filmliste/Programmneustart der Fall sein
        return;
    }
    final Path filmPath = Paths.get(datenDownload.arr[DatenDownload.DOWNLOAD_ZIEL_PFAD_DATEINAME]);
    if (Files.exists(filmPath)) {
        final String strFilePath = filmPath.toString();
        String strComment = datenDownload.film.arr[DatenFilm.FILM_BESCHREIBUNG];
        if (strComment != null) {
            //no need to write spotlight data when there is no description...
            if (strComment.isEmpty()) {
                return;
            }

            //replace quotation marks...
            strComment = strComment.replace("\"", "\\\"");

            final String script = "tell application \"Finder\"\n"
                    + "set my_file to POSIX file \"" + strFilePath + "\" as alias\n"
                    + "set comment of my_file to \"" + strComment + "\"\n"
                    + "end tell\n";
            try {
                final ProcessBuilder builder = new ProcessBuilder("/usr/bin/osascript", "-e");
                builder.command().add(script);
                builder.start();
            } catch (Exception ex) {
                if (daten.getMediathekGui() != null) {
                    SwingUtilities.invokeLater(() -> {
                        final ErrorInfo info = new ErrorInfo(null,
                                "<html>Es trat ein Fehler beim Schreiben des Spotlight-Kommentars auf.<br>" +
                                        "Sollte dieser häufiger auftreten kontaktieren Sie bitte " +
                                        "das Entwicklerteam.</html>",
                                null,
                                null,
                                ex,
                                Level.SEVERE,
                                null);
                        JXErrorPane.showDialog(daten.getMediathekGui(), info);
                    });
                }
                Log.errorLog(915263987, "Fehler beim Spotlight schreiben" + filmPath.toString());
                 //AppleScript may not be available if user does not use the official MacApp.
                //We need to log that as well if there are error reports.
                try {
                    if (!System.getProperty("OSX_OFFICIAL_APP").equalsIgnoreCase("true")) {
                        logUnofficialMacAppUse();
                    }
                } catch (NullPointerException ignored) {
                    logUnofficialMacAppUse();
                }
            }
        }
    }
}
```

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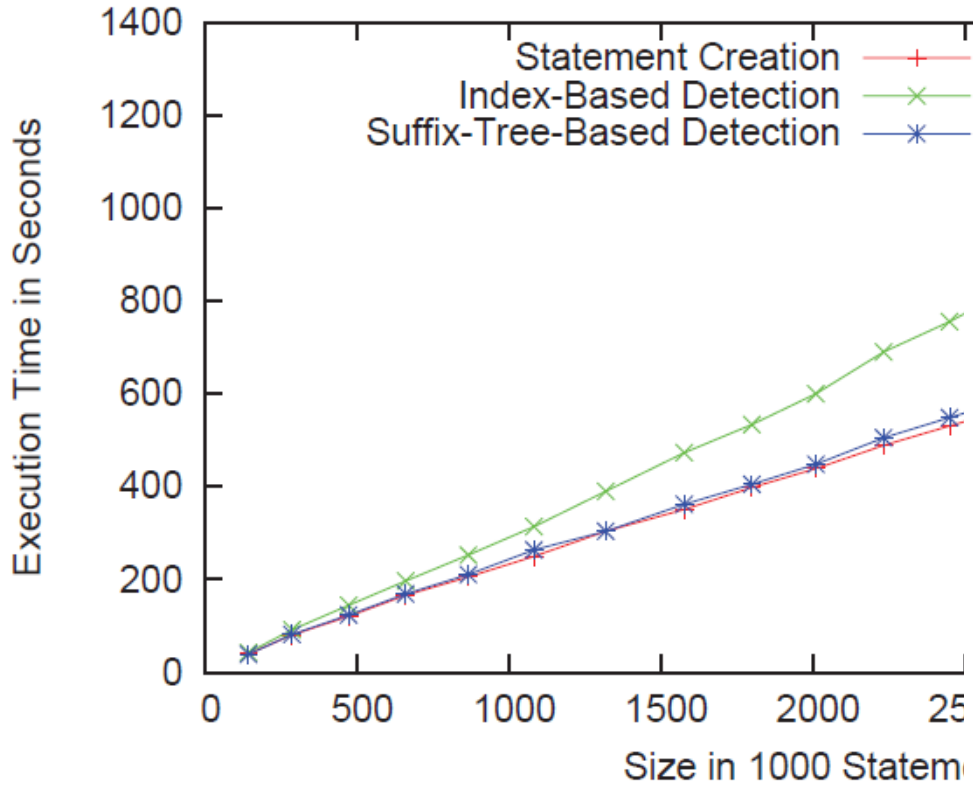
                    }
                } catch (NullPointerException ignored) {
                    logUnofficialMacAppUse();
                }
            }
        }
    }
}
```

Agenda

1. Why?
2. What‘s most important?
3. Choosing a topic
4. Doing the work
5. Presentation


FAKULTÄT FÜR INFORMATIK
DER TECHNISCHEN UNIVERSITÄT MÜNCHEN
FAKULTÄT FÜR INFORMATIK
DER TECHNISCHEN UNIVERSITÄT MÜNCHEN
Bachelor's Thesis in Computer Science
Discovery of missed reuse opportunities
Tobias Völke


Execution Time in Seconds
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Statement Creation
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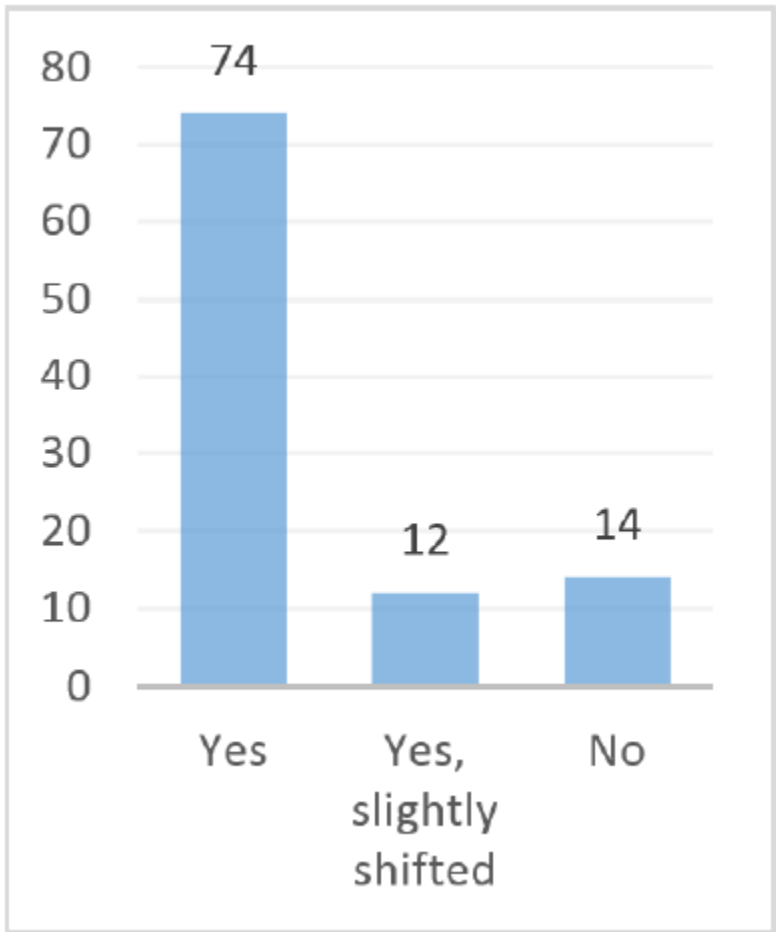
Suffix-Tree-Based Detection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74
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14
Yes
Yes, slightly shifted
No

Roles

Author

Supervisor

Examiner

Roles

Author

- Creates solution
- Implements code
- Writes text
- Presents work

Supervisor

- Invents topic
- Feedback for work
- Evaluation

?

Examiner

- Feedback topic
- Formal Evaluation

?

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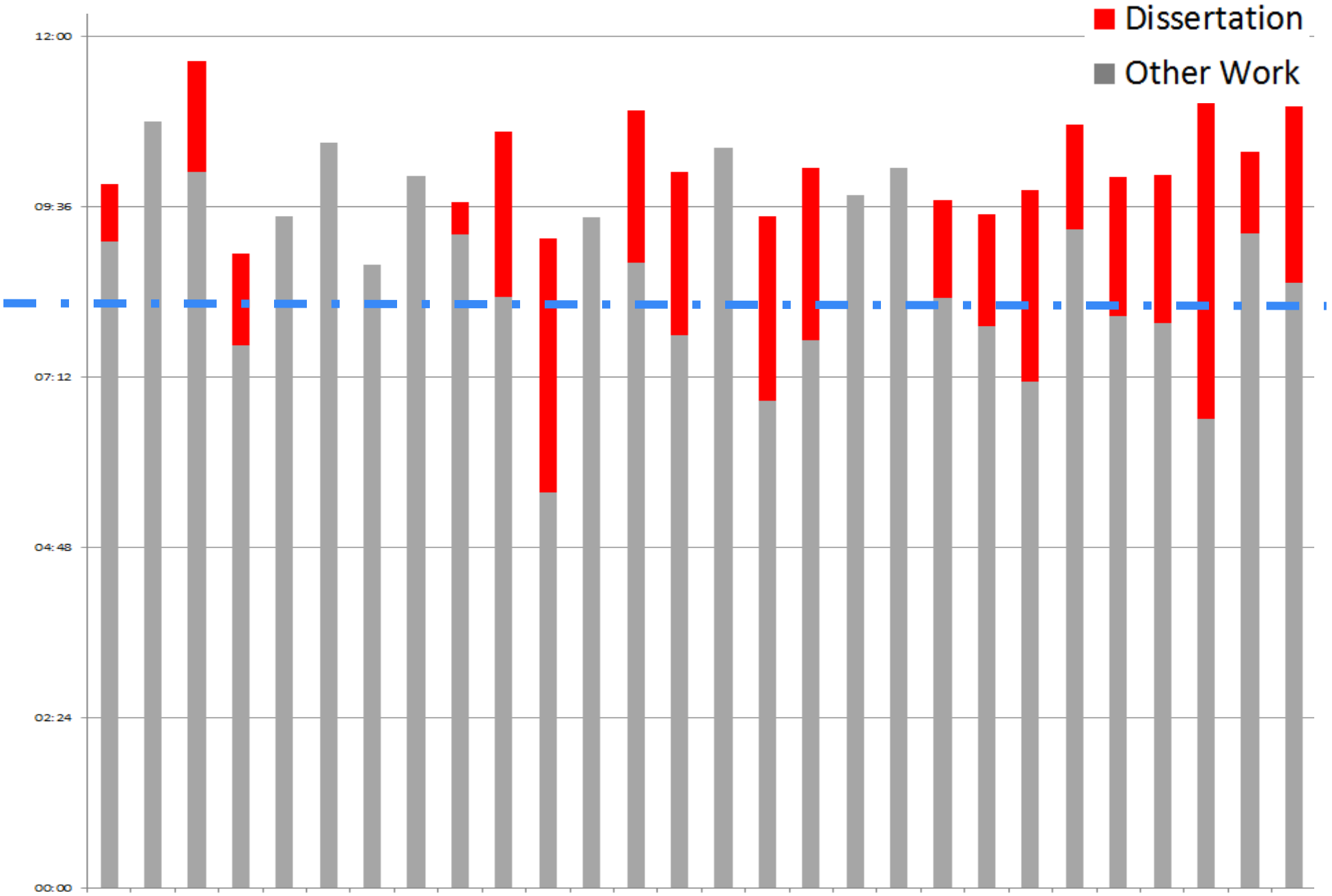
Dissertation
Other Work
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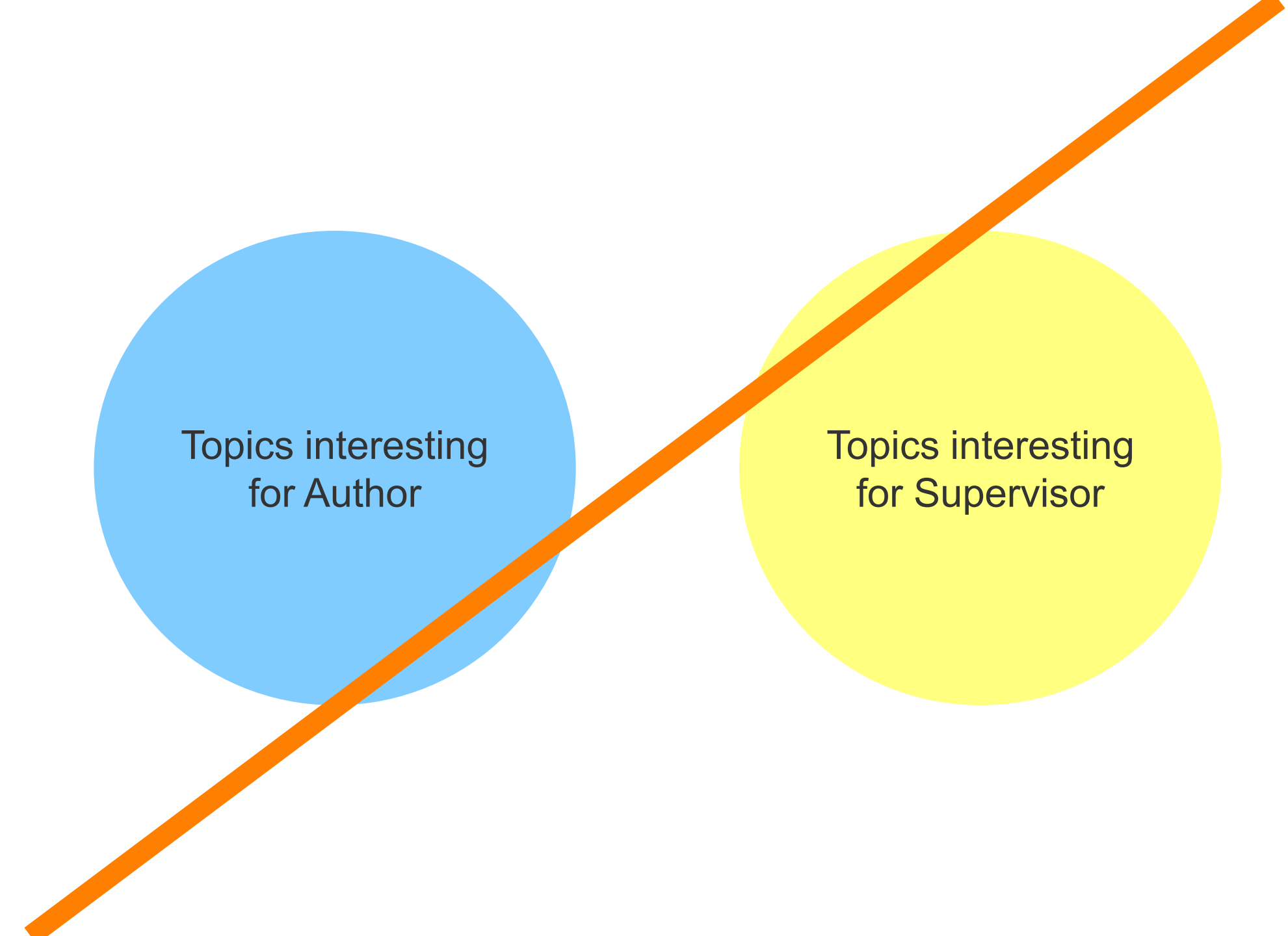
Topics interesting
for Author
Topics interesting
for Supervisor

Sources

- Courses of studies
- Chair webpages
- (Old) topic descriptions

Ask potential supervisors! They are looking forward to your initial application!

Thesis Application is an Application!

You should address two important points:

- Motivation: why are **you** interested?
- Strengths: why should **you** work on the topic?

Often helpful:

- Transcript of Records
- CV

What if I don‘t have a Topic in Mind?

- Ask potential supervisors for ideas

- As a supervisor, I do **not** expect
  - Students to come up with thesis topics
  - Students to apply only for documented topics


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From: Roman Haas
To: Elmar Juergens
Date: 10.12.2013

Hallo Herr Juergens,

ich studiere Informatik an der TUM im fünften Semester und möchte im kommenden Sommersemester meine Bachelorarbeit schreiben. Ich interessiere mich für Software Engineering-Themen wie z. B. Tests, Analyse, Softwarequalität und habe im Rahmen meiner Werkstudententätigkeit auch erste Erfahrungen in diesen Bereichen gesammelt. Beispielsweise beschäftige ich mich damit, Tests einer Komponente in einem Flugsimulator zu automatisieren. Außerdem habe ich im Sommer bei der Ferienakademie an einem Kurs zum Thema "Programmanalyse" teilgenommen, der mir viel Spaß gemacht hat.

Haben Sie noch Themen für eine Bachelorarbeit aus den Bereichen Software Engineering/ Testing/ Analyse?
Falls ja, könnten wir uns mal auf einen Kaffee treffen, um uns darüber genauer zu unterhalten?

Danke für Ihre Antwort!

Viele Grüße

Roman Haas

From: Luca Weber
To: Prof. Dr. Bauer
Date: Today

Dear Professor Bauer,
I am currently in my 6th semester of studying Informatics (Computer Science) at the Technical University of Munich and plan to write my Bachelor's thesis during the upcoming winter semester. Having followed your chair's recent research contributions and focus on the intersection of Artificial Intelligence and modern software engineering practices, I am highly motivated to apply for a thesis position under your supervision.
The integration of AI capabilities into the software development lifecycle—whether through intelligent code generation, LLM-based refactoring, or automated defect and code smell prediction using machine learning—presents one of the most compelling innovation areas in computer science today. I am eager to contribute to this paradigm shift by dedicating my thesis specifically to the field of "AI for Software Engineering".
Throughout my undergraduate studies, I have consistently aligned my academic focus with software engineering and code quality. In the seminar "Software Quality" (Grade 1.3), I conducted deep-dive analyses into automated structural testing and architectural refactoring paradigms. Furthermore, during the practical "Software Engineering Lab" (Grade 2.0), I successfully put agile principles into practice, contributing as a core backend developer within a full-semester Scrum environment. To support an AI-focused engineering thesis, I bring robust practical programming skills to the table.
Alongside an advanced command of Java—demonstrated by my personal open-source tool "CleanTask," which implements rigorous Test-Driven Development (TDD) via JUnit—I program extensively in Python. My GitHub project "E-Sports Match Analyzer" highlights my experience with automated REST API data aggregation, statistical analysis, and algorithmic visualization using Pandas and Matplotlib.
This combination of a firm grounding in classical software architecture and end-to-end Python engineering provides a solid foundation for accelerating my onboarding into your chair's ongoing research initiatives. I am highly flexible regarding the exact problem scope—be it evaluating large language models for synthetic test case generation or designing telemetry-driven ML models—and look forward to dedicating my energy to a challenging topic.
Thank you for considering my application. I have enclosed my CV and a provisional transcript of records, and I would welcome the opportunity to discuss potential research topics with you in a personal meeting.

Sincerely,

Luca Weber

Luca Weber
Undergraduate Computer Science Student

Schellingstraße 15, 80799 Munich, Germany
Phone: +49 151 12345678 | Email: luca.weber@tum.de
GitHub: github.com/luca-weber-dev
Date of Birth: May 14, 2001

EDUCATION

Technical University of Munich (TUM) 10/2023 – Present
Bachelor of Science (B.Sc.) in Informatics
Current Semester: 6th Semester • Expected Graduation: 09/2026
Current GPA (Cumulative Grade): 2.4
Relevant Courses & Achievements:
- **Seminar "Software Quality": Grade 1.3**
  Focus on code smells, structural refactoring, and automated software test coverage.
- **Lab Course "Software Engineering Lab": Grade 2.0**
  Full-stack agile development of a web application within a Scrum team; backend architecture focus.
- **Lecture "Algorithms and Data Structures": Grade 2.7**

Jakob-Fugger-Gymnasium, Augsburg 09/2012 – 06/2020
General Higher Education Entrance Qualification (Abitur)
Final Grade (GPA): 2.3

PERSONAL PROJECTS (GITHUB)

Project "CleanTask" (Java) Repository
Description: A lightweight, command-line-based task management utility application.
Focus: Rigorous application of Clean Code paradigms and Test-Driven Development (TDD) using JUnit. Successfully transferred and validated theoretical concepts from the "Software Quality" seminar.

Project "E-Sports Match Analyzer" (Python) Repository
Description: Automated script querying and evaluating public gaming match data via external REST APIs.
Focus: Practical data processing and analytical visualization (Pandas, Matplotlib). Bridges personal interest in gaming with modern programmatic engineering practices.

SKILLS & INTERESTS

Programming	Java (Advanced), Python (Advanced), SQL (Basic Knowledge)
Tools & Methods	Git, JUnit, Core Fundamentals of Scrum & Agile Software Development
Languages	German (Native), English (Fluent / CEFR Level C1)
Interests	**Software Engineering:** Scripting automation workflows and building desktop projects. **Gaming:** Competitive strategy games (focus on collaborative problem-solving).

*** FAKE DOCUMENT / UNNOFFIZIELLES MUSTER / VALIDATION VOID ***

TECHNICAL UNIVERSITY OF MUNICH
Department of Informatics

TRANSCRIPT OF RECORDS (EXEMPLARY)

Name:	Luca Weber	**Matriculation No.:**	03759218 (Fictional)
Date of Birth:	May 14, 2001	**Place of Birth:**	Augsburg
Degree Program:	B.Sc. Informatics	**Current Semester:**	6 (SS 2026)
Enrollment:	Winter Semester 2023/24	**Status:**	Simulation / Sample Only

Module No.	Module Title	Semester	ECTS Credits	Grade
IN0001	Introduction to Informatics 1	WS 23/24	8	2.0
IN0002	Fundamentals of Programming	WS 23/24	8	1.7
MA0901	Calculus for Informatics	WS 23/24	8	3.0
IN0018	Discrete Probability Theory	WS 23/24	6	2.7
IN0003	Introduction to Informatics 2	SS 24	6	2.0
MA0902	Linear Algebra for Informatics	SS 24	8	2.7
IN0004	Computer Architecture and Networks	SS 24	6	2.7
IN0006	Introduction to Software Engineering	SS 24	6	2.0
IN0007	Algorithms and Data Structures	WS 24/25	6	2.7
IN0008	Fundamentals of Databases	WS 24/25	6	2.0
IN0009	Basic Principles: Operating Systems	WS 24/25	6	2.7
IN0011	Introduction to Theory of Computation	WS 24/25	8	3.3
IN0010	Computer Networks and Distributed Systems	SS 25	6	2.3
IN0019	Numerical Programming	SS 25	6	3.0
IN0041	Fundamentals of Artificial Intelligence	SS 25	5	2.3
IN0014	Seminar: Software Quality	WS 25/26	5	1.3
IN0012	Practical Course: Software Engineering Lab	WS 25/26	10	2.0

Total ECTS Credits Achieved: 114.0
Current Cumulative Grade Point Average (GPA): 2.4

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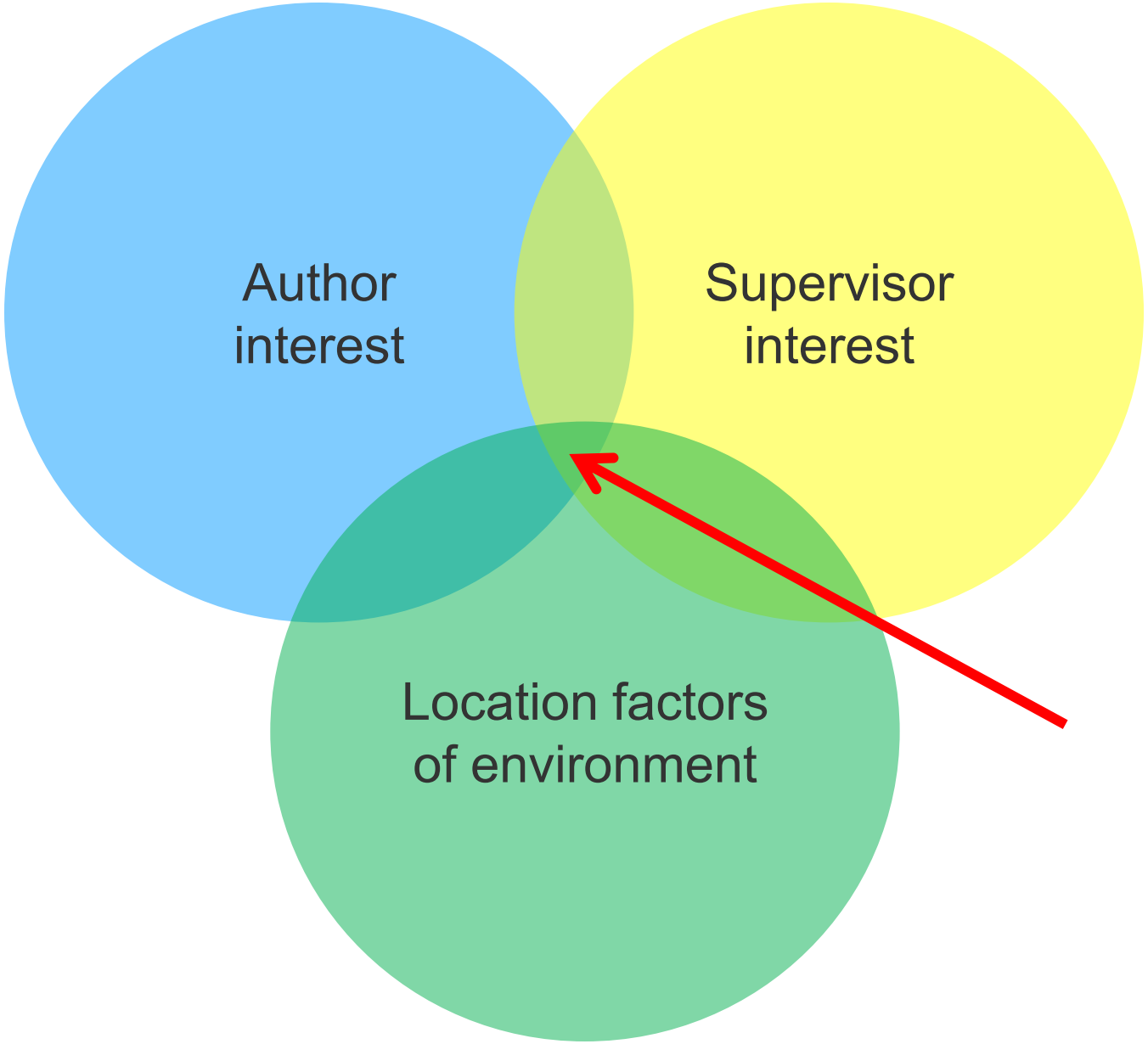
Not Valid / Void — Sample Only - No Stamp


Author
interest
Supervisor
interest
Location factors
of environment

TUM

- Contact to research (PhD?)
- Easier to find supervisor
- Scientific publication more probable
- More visionary topics
- Experience in Supervision

⇒ Insight into scientific work

Industry

- Contact to company (Job?)
- Easier to find topic relevant in practice
- You might get paid
- Publication more difficult (Exception: Case study)
- Synchronization of supervisors requires more effort and is not easy
- Requires TUM agreement to supervise the thesis before beginning the work

⇒ Insight into Company

Special Case

Spin-Offs/Research institutes: sometimes best of both worlds

CQSE

Teamscale

Development
Operations

Services

Audits
Quality Control

Research

Software Quality
e.g., Coding, Testing

Teamscale

Events › Software Intelligence Night @ TUM Juli 2026

Register

Jakob Rott • Dr. Roman Haas

Jetzt anmelden

Jakob Rott • Dr. Roman Haas

TUM School of Computation, Information and Technology (Raum 01.09.014) →

09. Juli 2026

ab 17 Uhr

kostenlos

Working Student for Software Development (m/f/d)	Student	München + 4	New
Working Student for Software Quality Consulting (m/f/d)	Student	München + 4	New

Come and enrich our team 👩‍💻

Clone Detection is not the only thing we are good at.

Apply

When does a topic suck?

If you cannot tell, whether a solution for it is good, or not.

Most important factors:

- Is there a clear problem statement?
- Is there a way to evaluate alternative solutions?

Why important?

- Helps you choose between alternatives
- Helps you convince your supervisor
- Helps your advisor to convince his professor (your examiner)

Refactoring Suggestions for Long Methods

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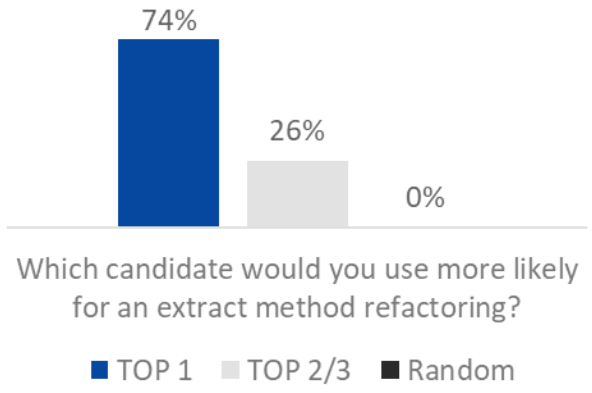
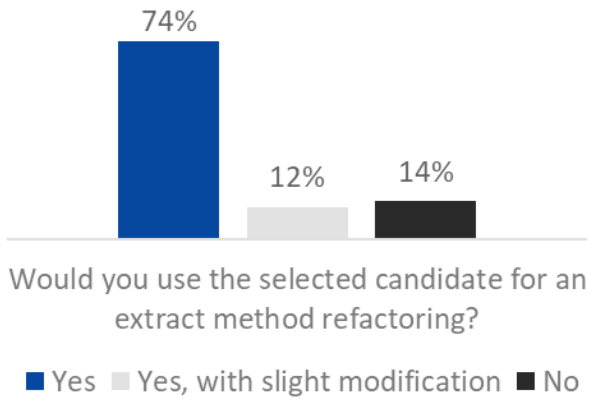




Topic-Antipatterns

- Search my Literature
- Implementation only
- Choose my Tool

– Lack of objective evaluation criteria
– Hard to guide your own work
– Publication difficult

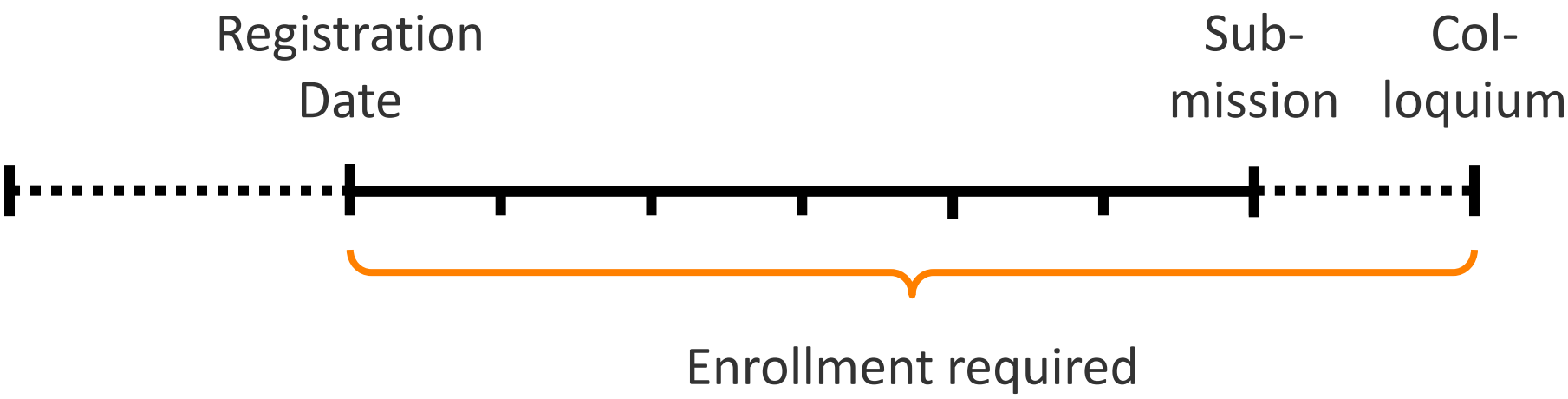
Schedule

- Internal Thesis

- External Thesis

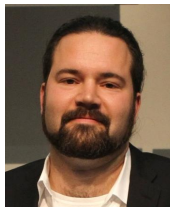
- Spin-Offs/Research Institutes

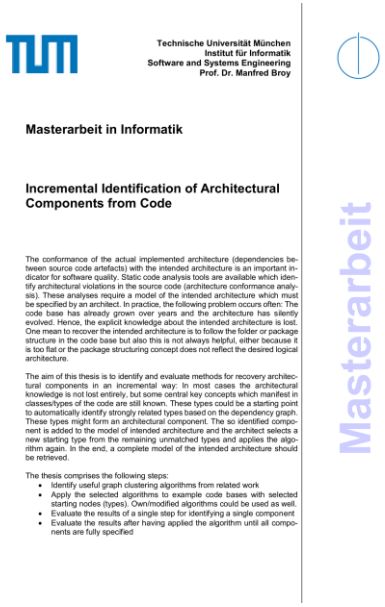
Enrollment



No enrollment required for colloquium held until the end of the 1st week of lectures.

Formal Registration





Technische Universität München
Institut für Informatik
Software and Systems Engineering
Prof. Dr. Manfred Broy

Masterarbeit in Informatik

Incremental Identification of Architectural Components from Code

The conformance of the actual implemented architecture (dependencies between source code artefacts) with the intended architecture is an important indicator for software quality. Static code analysis tools are available which identify architectural violations in the source code (architecture conformance analysis). These analyses require a model of the intended architecture which must be specified by an architect. In practice, the following problem occurs often: The code base has already grown over years and the architecture has silently evolved. Hence, the explicit knowledge about the intended architecture is lost. One mean to recover the intended architecture is to follow the folder or package structure in the code base but also this is not always helpful, either because it is too flat or the package structuring concept does not reflect the desired logical architecture.

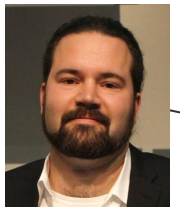
The aim of this thesis is to identify and evaluate methods for recovery architectural components in an incremental way: In most cases the architectural knowledge is not lost entirely, but some central key concepts which manifest in classes/types of the code are still known. These types could be a starting point to automatically identify strongly related types based on the dependency graph. These types might form an architectural component. The so identified component is added to the model of intended architecture and the architect selects a new starting type from the remaining unmatched types and applies the algorithm again. In the end, a complete model of the intended architecture should be retrieved.

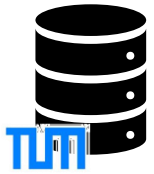
The thesis comprises the following steps:

- Identify useful graph clustering algorithms from related work
- Apply the selected algorithms to example code bases with selected starting nodes (types). Own/modified algorithms could be used as well.
- Evaluate the results of a single step for identifying a single component
- Evaluate the results after having applied the algorithm until all components are fully specified

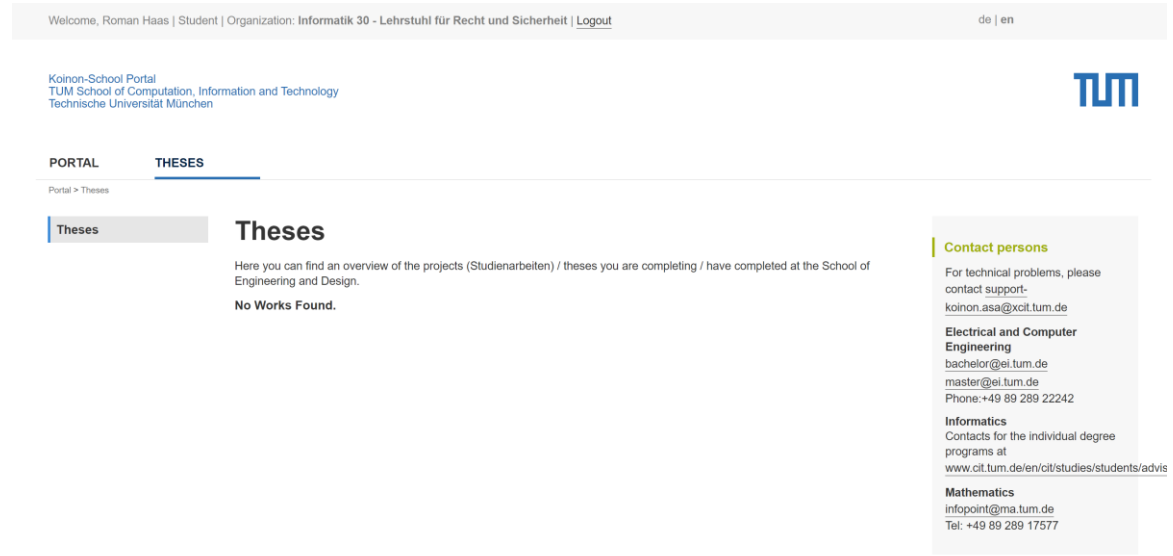
Masterarbeit

Formal Registration

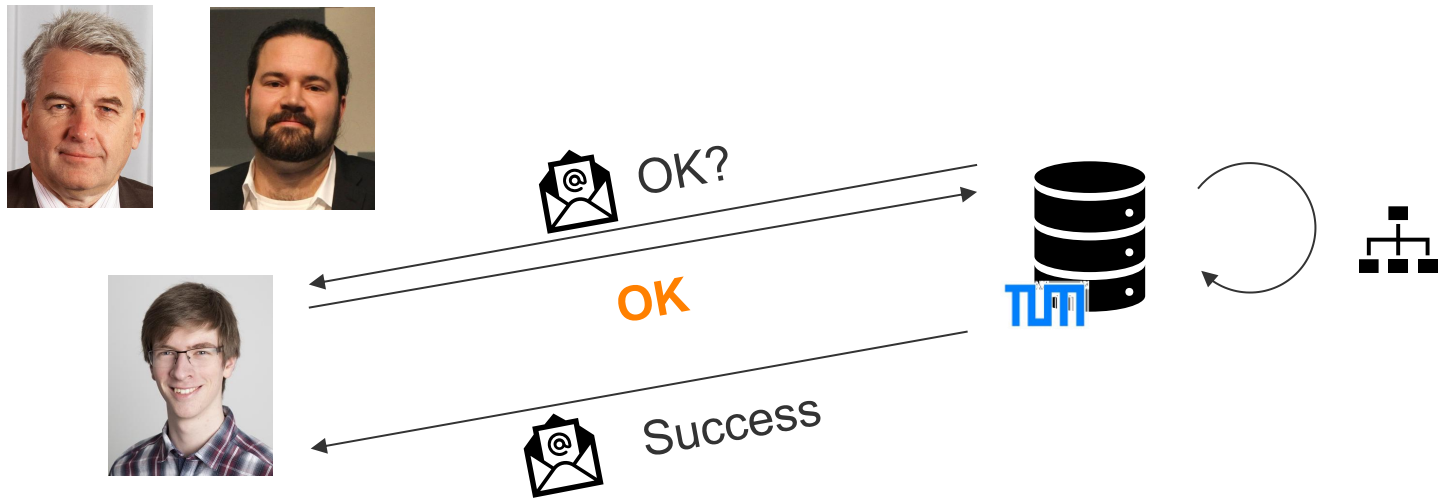




Koinon



Formal Registration



You can start the thesis on every day of a month

My Advice: Register promptly.

When to Register?

- My advice: **Register promptly**!

- Still, there is no risk: you can withdraw without any consequences within the first third of your writing time.

- Extension
  - Because of Sick Leave: No problem
  - Because of other reasons: Potentially complex. Try to address using scoping

Questions?

- Choosing a topic?
- Topic quality criteria?
- Internal vs. external thesis?
- Registration?

Agenda

1. Why?
2. What‘s important?
3. Choosing a topic
4. Doing the work
5. Presentation

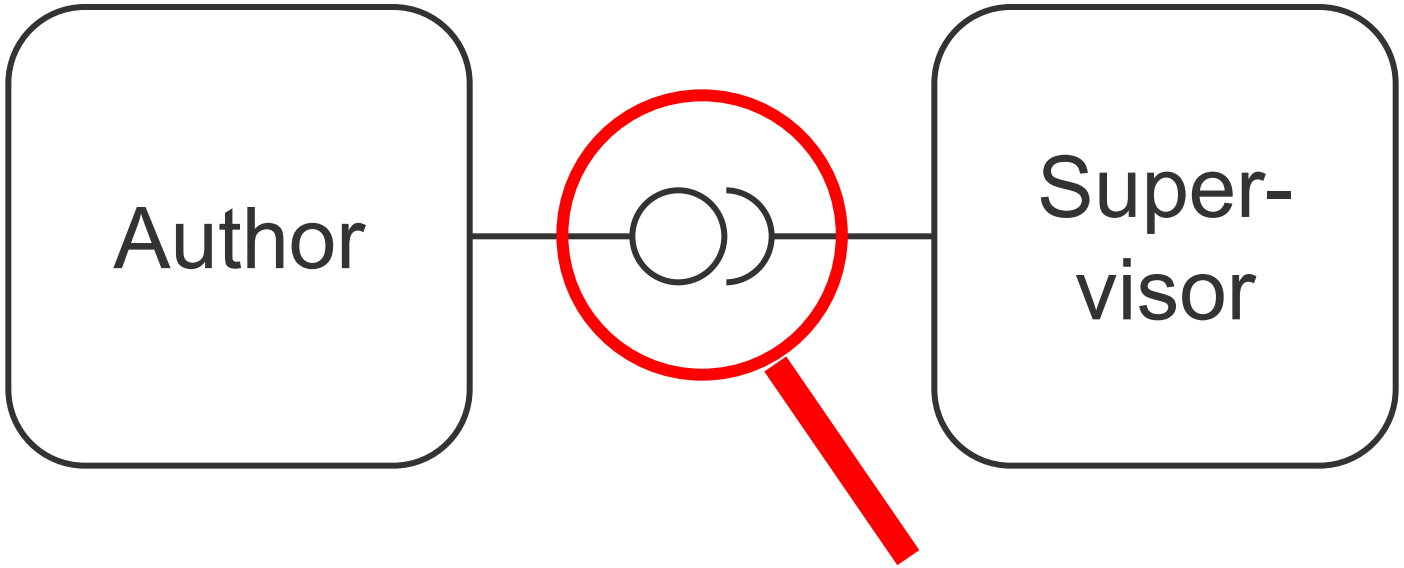
What characterizes scientific work?

German: Wissenschaftliches Arbeiten: schafft Wissen.

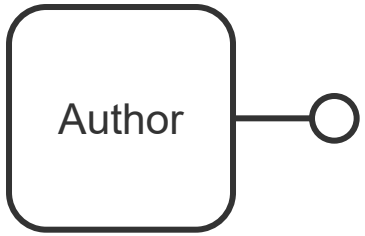
$\Rightarrow$ Scientific work creates knowledge

- Separate opinion / hypothesis from empirical results
- Separate your results from previous work

Goal: Enable reader to trace (or in some cases reproduce) your results.


Author
Super-
visor

Author Responsibilities

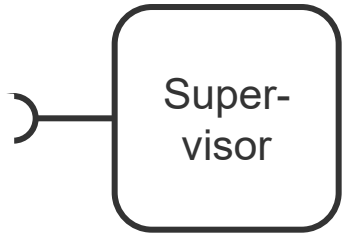


- Time management
- Request feedback
- Communicate problems
- Make decisions

To make supervisor happy, report in each meeting

- Status last meeting
- What happened since then
- What you plan to do next, which problems you see

Supervisor Responsibilities

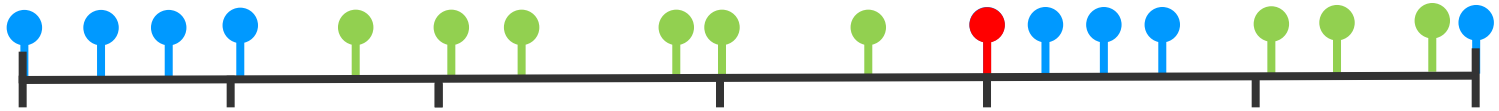


- Topic definition and -clarification
- Scoping
- Giving Feedback

Not Responsibility

- Micro-Management & Time management
- Take away decisions
- Proof-read complete work

How often to meet?



Regular meeting

Meeting on demand

Feedback for outline

Parts

1. Introduction
2. Fundamentals
3. Related Work
4. Solution Approach
5. Evaluation
6. Future Work
7. Conclusion

Parts

1. Introduction
2. Fundamentals
3. Related Work
4. **Solution Approach**
5. **Evaluation**
6. Future Work
7. Conclusion

> 2/3 of thesis

OCTOBER 13, 2014 | ELMARJUERGENS | EXECUTION | EDIT

Thesis Architecture

The outline is the architecture of your thesis. It decomposes your document into components (called chapters) with dependencies between them (called references). As for software, the architecture plays a crucial role for the success of your project.

Since text is hard to refactor (much harder than source code), it is tedious manual work to fix an outline that does not work properly later. Minimize this risk by 1) using a standard architecture and 2) early validation of a prototype (through supervisor feedback).

Standard Architecture

A suitable *software* architecture allows the most important operations to be performed with high performance, even if this increases the cost of other operations. A search engine architecture, for example, is optimized for performance of search queries. Other text operations, say spell checking, are slow or not supported at all.

A suitable *thesis* outline allows a readers to answer the most frequent questions with high performance (i.e. without having to read the whole document). Which problem does the thesis solve? Did the approach work? What are its results and limitations? Which section should I read for details? Less important questions, say in which order the ideas occured to the author, may not be answerable at all.

https://thesisguide.org/2014/10/13/thesis-architecture/

Tools

- LaTeX
- Version Control System (including a backed up server)
- JabRef / Zotero / Mendeley / Citavi

- Template (example)
- Formal requirements (DE, EN)

Work Routine

09:00

10:00 Coffee Break, 10:00

11:00

12:00 Lunch, 12:00

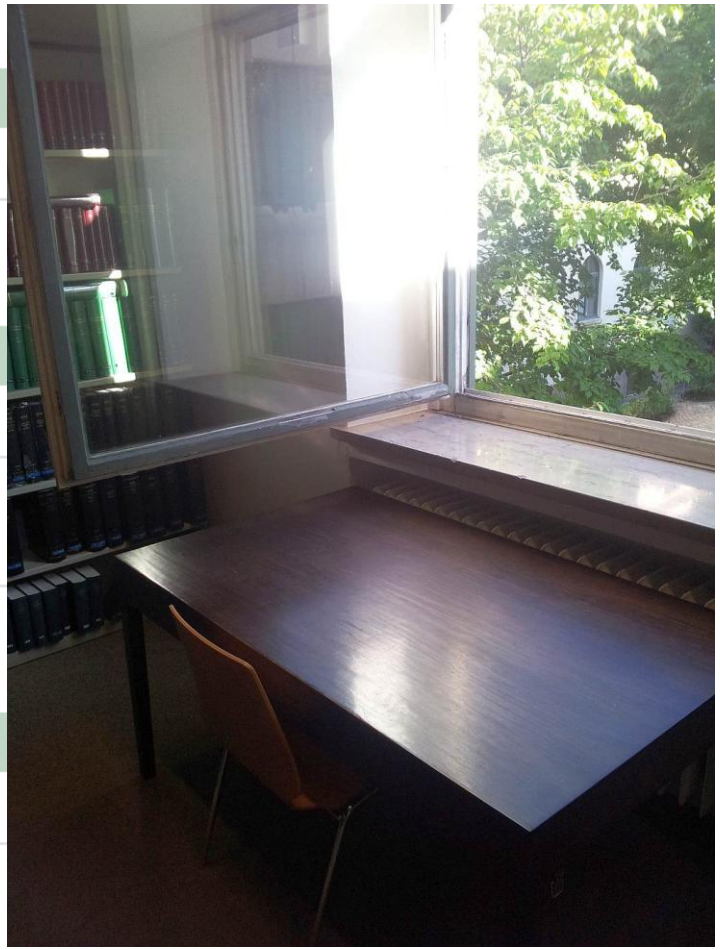
13:00

14:00

15:00 Coffee Break, 15:00

16:00

17:00

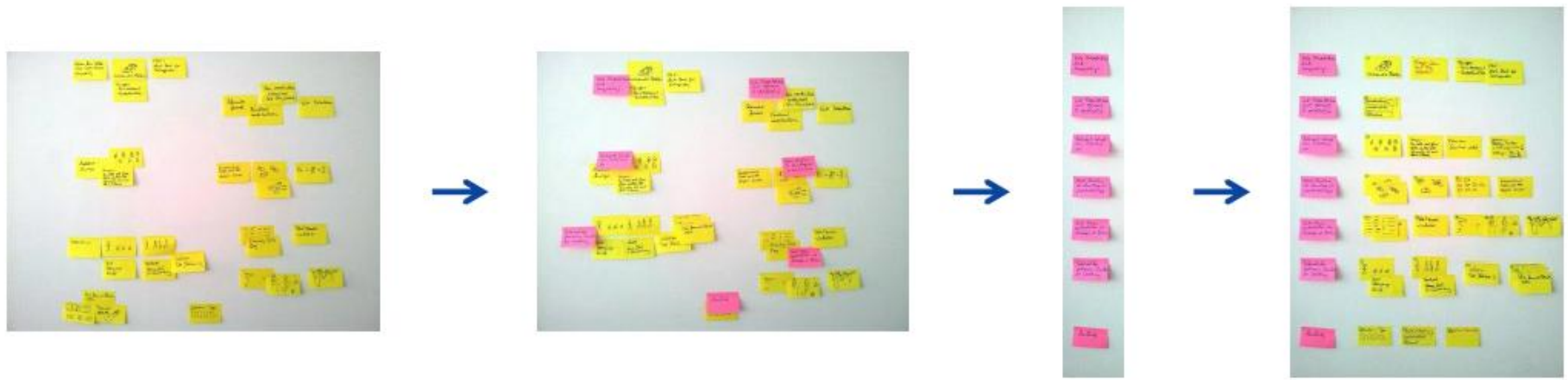


Questions?

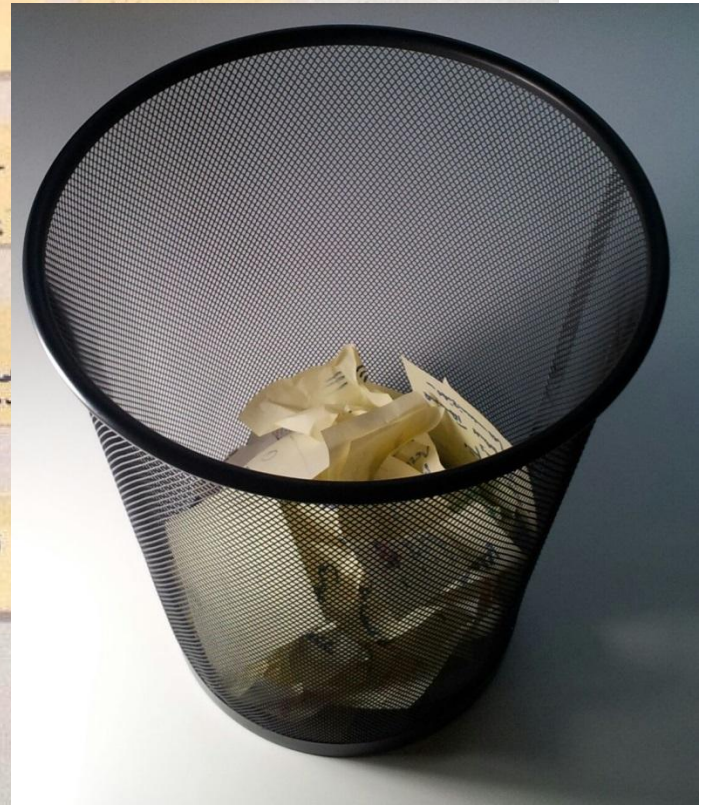
- Interface Author / Supervisor?
- Supervision?
- Tools?
- Where and how to write?

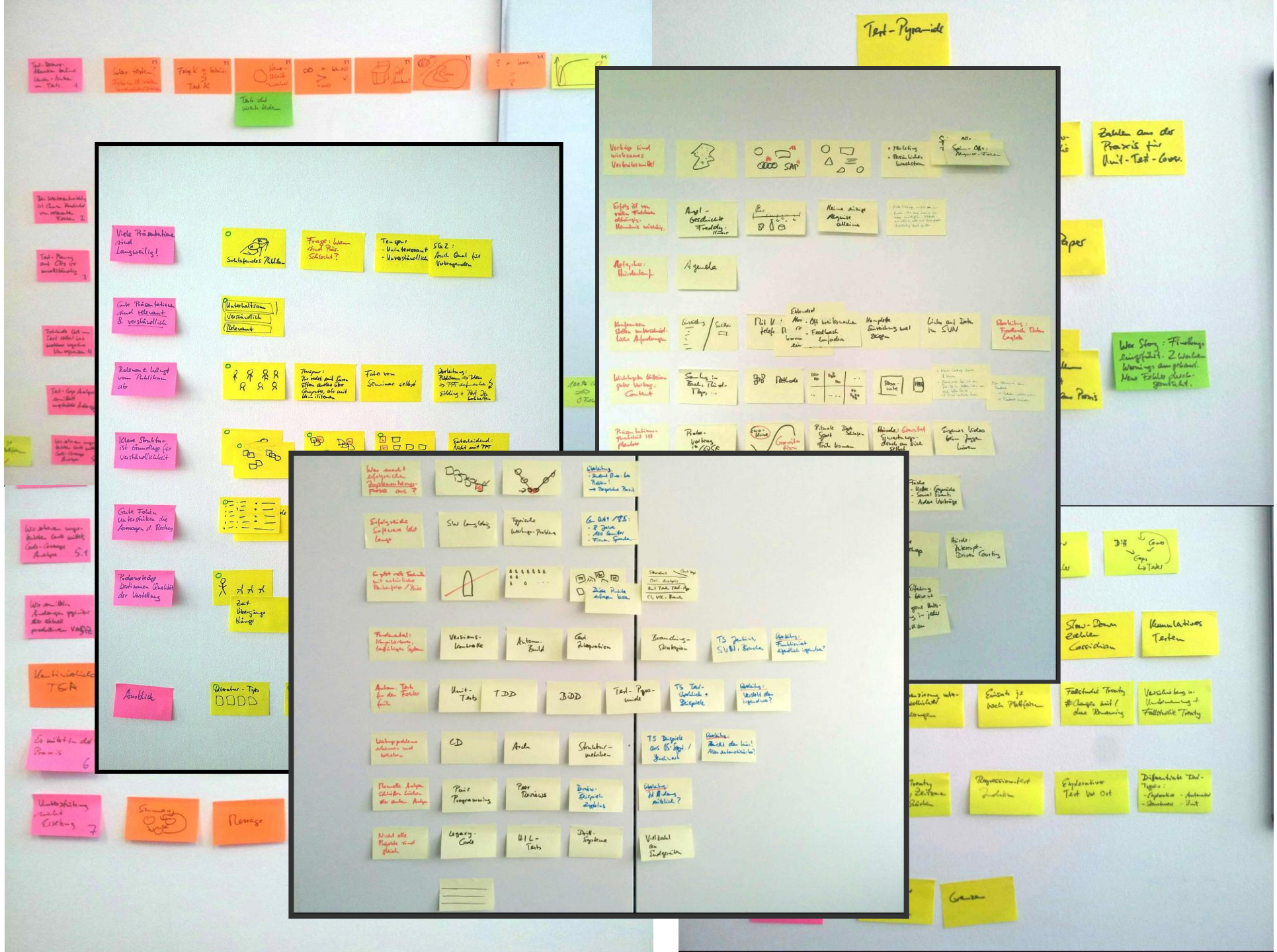
Agenda

1. Why?
2. What‘s important?
3. Choosing a topic
4. Doing the work
5. Presentation




IKEA-
Arbeit Daniela
Teamrad -
Folie
Gliederung
Eröffnung:
Uni
Extern
Visualisierung
Zeitmgmt
Feedback
Pause
Pflicht




Test-Pyramide
Viele Präsentationen sind Langweilig!
Gute Präsentationen sind Relevant & Verständlich
Relevant hängt vom Publikum ab
Klare Struktur ist Grundlage für Verständlichkeit
Gute Folien unterstützen die Aussagen d. Redners
Fadenverträge definieren Qualität der Vorstellung
Augenblick
Schlafendes Publikum
Frage: Wann sind Pausen Schlecht?
Unterhaltsam
Verständlich
Relevant
Foto von Seminar selbst
Zeit Übergänge Hänge
Roman
Paper
Zahlen aus der Praxis für Unit-Test-Cover.
Wer Story: Findung, Eingriff!. 2 Wochen Warnings ausgebaut. Neue Fehler gleich-gemacht.
Slow-Down Zahlen Cassidian
Kumulatives Testen
Unit-Tests
TDD
BDD
Test-Pyramide
CD
Pair Programming
Legacy-Code
HIL-Tests
Regressionstest
Explorativer Test vor Ort

THESIS GUIDE

START HERE PREFACE CONTENT CONTRIBUTE ABOUT ME

MARCH 4, 2015 | ELMARJUERGENS | PRESENTATION | EDIT

How to Draft Your Presentation

When I listen to a thesis presentation, I need to get the big picture before I care about the details. Until I have understood the problem statement, for example, I do not care how an algorithm works or how its average-case amortized runtime complexity beats existing solutions. Not even if it is presented with a nifty visualization.

In other words, if the big picture of a presentation—its structure—is messed up, no amout of clever visuals can save it. The first priority is thus to get the presentation structure right.

What do I mean by *presentation structure*? The presentation's composition of of its constituent parts. How much time you spend on which part. Which one you focus on. Which thesis content you shorten, or leave out entirely. Whether you include an example, presentation. Which running example. And so on.

Creating the structure is about making choices. Much like software architecture decisions, these choices are difficult to change later on. The goal of creating the presentation structure is thus to deliberately make and evaluate these choices early on, when they are still cheap to change.

When I prepared my first presentations, I always started by creating slides right away. This is a fundamentally bad idea, as it distracts from the structure.

As soon as I write my first letter on a slide, it has a font, a size, a color and a position. If I draw objects to form an info graphic, they have relative positions, alignment, proximity, contrast. All these properties force me to make choices. Or accept default settings, which are often ugly. Since ugly slides are irritating, they demand fixing. This ties up my time with tweaking. However, none of the visual properties of slides matter for presentation structure.

The key to focus on structure is to avoid details altogether. Use a medium that *does not allow details*. Thus shy slide-ware (Powerpoint and such) when drafting presentation structure.

My favourite drafting medium are whiteboard marker, post-its and a wall [1]. Since I am pretty clumsy with the whiteboard marker, and since the post-its are small, I simply cannot do details.

I use the process described by Nancy Duarte in her book *Resonate*. To make it tangible, I use examples from a presentation I did on presentation design [2].

Brainstorm

https://thesisguide.org/2015/03/04/how-to-draft-your-presentation/


No signal
01:30

Audience sees this

Next slide

SHOW TASKBAR DISPLAY SETTINGS END SLIDE SHOW

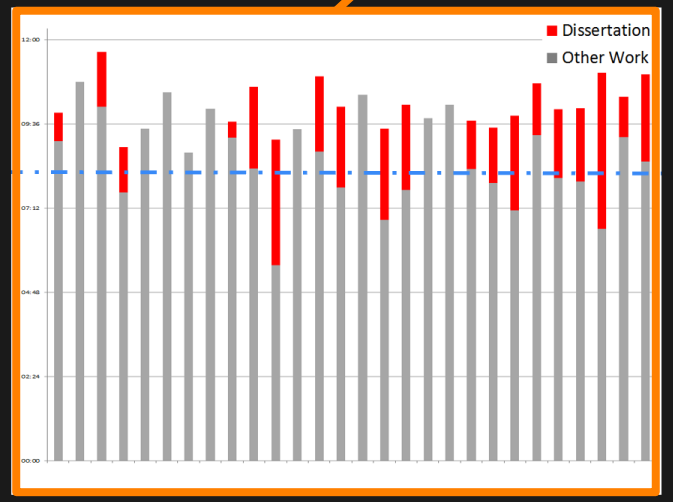
0:02:33 07:44

Agenda

1. Why?
2. What's important?
3. Choosing a topic
4. Doing the work
5. Presentation

Slide 19 of 77

Next slide



Choosing the topic also means choosing an advisor. This is obvious.
It also means choosing the amount of time the advisor has. This is less obvious. Let me explain.

My notes


Logitech

MARCH 4, 2015 | ELMARJUERGENS | PRESENTATION | EDIT

How to Rehearse Your Thesis Presentation

A new set of presentation slides is like a program that ha
probably contains bugs. It reduces the pain for all stakeh
yours, if you test it to discover (and fix) its bugs before ex

My test process for presentations has three steps. The fi
test of a program. The second one is in front of a test au
done by representative users. The third one is with your

Step One: Alone

The first rehearsal step is to give the presentation to an i

Step Two: Test Audience

The second rehearsal step is to give the presentation to a test audience.

Two to four persons make the perfect test audience size. A single person can miss too many problems or be too subjective. More than four add little value but complicate the rehearsal, since everybody wants their say. Personally, I prefer three test audience members.

The test audience comments are the more helpful, the more similar the test audience is to the audience of the final presentation. Computer science students are thus preferable over parents over grandparents. However, take what you can get. A rehearsal in front of your grandparents is still far better than no rehearsal in front of an audience.

I use this process for test presentations with an audience:

- Hand out pen and paper, including a printout of the slides. It is easiest to note down visual slide problems on the slides themselves. It also allows you to collect the notes afterwards.

- Plan at least three times the amount of time of the presentation for the entire meeting (e.g. 60min rehearsal meeting to test a 20min presentation).

https://thesisguide.org/2015/03/04/how-to-draft-your-presentation/

After handing in

- Celebrate!
- Make presentation appointment early
- Communicate your time constraints early to supervisor

JUNE 10, 2016 | HAAS93 | FAQ, GENERAL | EDIT

Avoiding Typical Pitfalls (not only) at TUM

This post is from Roman Haas (he was advised by Elmar in his Bachelor's Thesis).

It focuses on more or less typical problems that appeared to him and his friends during our theses and how to avoid them. They are described by anti-patterns, i.e. there is always a description of a problem and a possible solution for it. The problems are sorted by the moment when you should pay attention to them: the first ones may appear at the beginning of your work, the latter ones appear during your work or at the end.

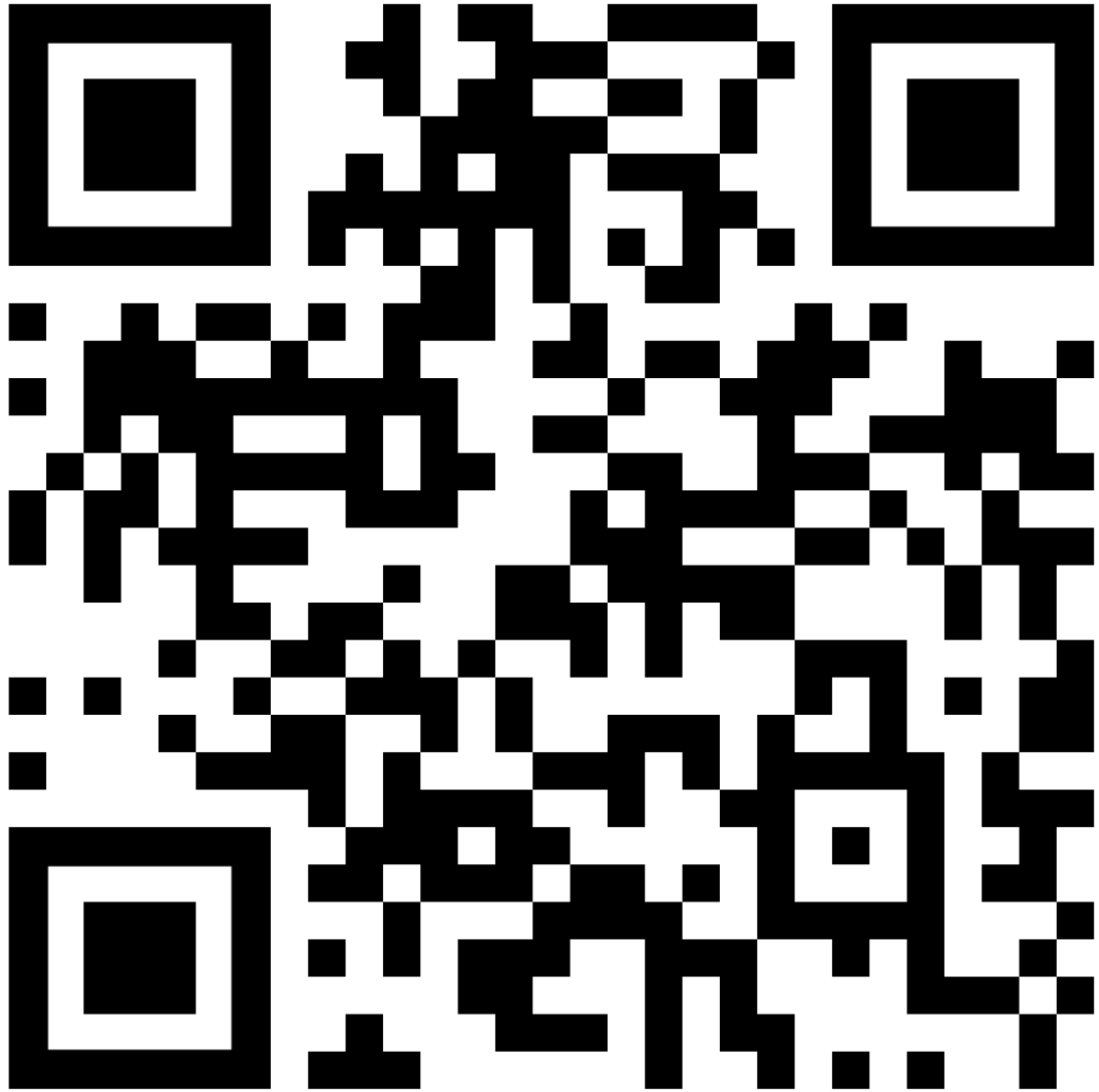
Rating Criteria Surprise

Problem: You are not happy with the final grade of your thesis because you spent too much time on things that are not (so) relevant for the grade.
Solution: Ask your supervisor at the beginning of the work which criteria will be used to rate the thesis. Does the code that you wrote for the thesis influence the grade? What about the presentation at the end?

Wasting Time on Thesis Template

Problem: At the end of your writing time you realize that there are formal errors like formatting issues and content of the cover page in your thesis.
Solution: Look for a thesis template at the very beginning of your work, e.g. ask your friends which template they used. Do also check at the beginning whether all formal

https://thesisguide.org/2016/06/10/avoiding-typical-pitfalls-not-only-at-tum/



https://cqse.eu/feedback-tum-talk

TUM provides the platform.

It is your responsibility, to create your environment to write a successful thesis.

Thanks!

haas@cqse.eu

More information available at
https://thesisguide.org

Feedback:

http://cqse.eu/feedback-tum-talk