

Seminars: Collaborative Software Development and Software Variability

Kick-Off | Paul Bittner, Thomas Thüm | April 10, 2025

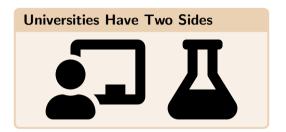






https://www.tu-braunschweig.de/isf/teaching/bachelorseminar





Universities Have Two Sides



Goals of the seminar

Look into the science part, in particular how science is done today!

First contact with . . .

- ... software engineering research,
- ... scientific writing,
- ... scientific collaboration,
- ... LATEX.

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... software engineering research,

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... scientific collaboration,

... LATEX.

Training ground for your bachelor's or master's thesis

Organization

Milestones

There are four milestones:

- · first paper draft
- peer-review
- · final paper
- · presentation

We expect:

- · a paper of 6-8 pages
- · the peer-review to follow our scheme
- · a presentation of TBA min

Communication

- · Material on our website
- · Announcements in Stud.IP

Three-part examination

- · paper (40%)
- · reviews (20%)
- · presentation (40%)

For paper and presentation you need to reach 50% of the points to pass each. If you fail a paper milestone, there won't be a presentation.

Submissions for Deadlines

- · Every submission is tracked via Gitlab ❖ (no e-mail!).
- · Make sure your progress is pushed by the deadline.
- When you make progress, commit and push the same day! We don't want to see all your changes in a single commit at a single day.

Material

Language

- · Material will be provided in English
- Paper and presentation are to be submitted in English

Templates

- · Templates will be provided for each milestone.
- The paper template must be used because that it is how it is done for scientific publishing. We are going to write in a real template for scientific papers from the Association of Computing Machinery.
- The review template must be used. It is based on the official reviewing template at a top software engineering conference.
- · The presentation template can be used.

The Name of the Title Is Hope

John Smith The Thervild Group Hekla, Iceland

ABSTRACT

A clear and well-documented BBK document is presented as an article formatted for publication by ACM in a conference proceedings or journal publication. Based on the "somet" document class, this article presents and explains many of the common variations, as well as many of the formatting elements an author may use in the preparation of the documentation of their work.

KEYWORDS

Do, Not, Us, This, Code, Pat, the, Correct, Terms, for, Your, Paper

John Smith. 2018. The Name of the Title Is Hope. In Proceedings of Make sure to enter the correct conference title from your rights confirmation emai (Conference acronym 'XX). ACAI, New York, NY, USA, 6 pages. https://doi.

1 INTRODUCTION

ACM's consolidated article template, introduced in 2017, provides a consistent MFIp's style for use across ACM publications, and incorporates necessibility and metadata-extraction functionality necessary for future Digital Library endeavors. Numerous ACM and SG-specific EFIp's templates have been examined, and their unique features incorporated into this insule new templates.

If you are new to publishing with ACM, this document is a valuable guide to the precess of preparing your work for publication. If you have published with ACM before, this document provides insight and instruction into more recent changes to the article template.

The "accounts" document class can be used to recent articles for

template.

The "actuart" document class can be used to prepare articles for any ACM publication — conference or journal, and for any stage of publication, from review to final "camera-ready" copy, to the author's more version, with very few changes to the source.

2 TEMPLATE OVERVIEW

An noted in the introduction, the "actuart" document closs can be used to prepare many different kinds of documentation — a doubleamonymous initial submission of a full-length technical paper, a two-page SIGGRAPH Emerging Technologies abstract, a "cameraready" journal article, a SIGCHI Extended Abstract, and more — all by selecting the appropriate template style and template porumeters.

in Smith andld Group

This document will explain the major features of the document class. For further information, the BBX User's Guide is available from https://www.acm.org/publications/proceedings-template.

2.1 Template Styles

The primary parameter given to the "acmart" document class is the template style which corresponds to the kind of publication or SG spatialising the work. This parameter is enclosed in square brackets and is a part of the documentclass command:

Journals use one of three template styles. All but three ACM journals use the acmsmal1 template style:

acmsmall: The default journal template style.
 acmlarge: Used by JOCCH and TAP.
 acmtog: Used by TOG.

\documentclassfSTV(E)/acmart\

The majority of conference proceedings documentation will use the acaconf template style.

sigconf: The default proceedings template style.
 sigchi: Used for SIGCHI conference articles.
 sigplan: Used for SIGPLAN conference articles.

2.2 Template Parameters

In addition to specifying the tempdate style to be used in formatting your wock, there are number of tempdate parameters which medify some part of the applied tempdate style. A complete list of these parameters can be found in the BBX Une's Guide. Frequently-used parameters, or combination of rarameters, in

anonymous, review Suitable for a "double-anonymous" conference submission. Anonymizes the work and includes line numbers. Use with the command to print the submission's unions ID on each mare of the work.

 authorversion: Produces a version of the work suitable for posting by the author.
 screen: Produces colored hyperlinks.

This document uses the following string as the first command in the source file:

\documentclass[sigconf]{acmart}

3 MODIFICATIONS

Modificing the template — including but not limited to adjusting



Classes are at 3pm, Deadlines are at 8pm

```
Kick-Off (Today)
Apr 10
Apr 16
             Deadline
                         Technical Setup, Section Captions
Apr 21
                         End of Deregistration Period
Apr 23
             Deadline
                         Outline with Topic Sentences
Apr 24
             Class
                         Scientific Writing
Apr 30
             Deadline
                        Abstract
May 07
             Deadline
                         Introduction and Second Chapter
May 08
             Class
                        Consultation (online)
             Milestone
                         First Paper Draft
May 21
             Class
                        Peer-Review
May 22
May 28
             Deadline
                         Summary, Strengths, Weaknesses of Peer-Review
             Milestone
                        Peer-Review
Jun 04
                         Excursion Week
Jun 09-13
                         Reviewing our Peer-Reviews
Jun 05
             Class
                         Final Paper
Jun 25
             Milestone
Jun 26
             Class
                         Scientific Talks
Jul 02
             Deadline
                        Presentation Outline
Jul 10
             Milestone
                         Presentations (tentative)
```

ChatGPT and its Friends

- · LLM assistance is not forbidden but strongly discouraged from.
- · All generated text must be quoted as such (like you would quote other authors).
- · If you use AI, add a dedicated section "Writing Statement" at the end of your paper and attribute to the specific LLM used and in which section you used AI.
- · Furthermore, you must document all prompts used and the corresponding answers received when utilizing LLMs (or similar tools) in Git (e.g., in a plain text file or markdown file).
- · Usage of grammar and spell checking software does not need to be documented or reported.
- · We preserve the right to use tools to detect undocumented Al usage.

What are your next steps?

Watch the following lectures on scientific writing:





- Start assembling and review papers for your topic.
- Familiarize with your Gitlab repository (you will get access soon): Make sure you can compile the LATEX template. Read the README file!

Start reading and writing early!



https://www.tu-braunschweig.de/isf/teaching/masterseminar