



Technische
Universität
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Institut für Betriebssysteme
und Rechnerverbund



Seminar Distributed Systems

Blockchain: From Cryptocurrencies to Smart Contracts

Signe Rüsçh

October 25, 2017

Table of Contents

Allgemeines

Essay

Wie man einen Vortrag hält

Deadlines

- 5 Wochen für jedes Thema, aligned am Mittwoch

- **Beispiel Intro to Blockchains:**

0. Woche	25.10.2017	Themenausgabe
1. Woche	01.11.2017	-
2. Woche	08.11.2017	Betreuer Meeting
3. Woche	15.11.2017	Essay Abgabe, Dry-Run
4. Woche	22.11.2017	Review Abgabe, Presentation
5. Woche	29.11.2017	Essay Finale Abgabe

- Selbständiges Arbeiten, Zeitmanagement
- Ihr kümmert euch selbst Termine mit eurem Betreuer
- **Nichteinhalten einer Deadline = Nicht bestanden**

Deadlines

	25.10.	01.11.	08.11.	15.11.	22.11.	29.11.	06.12.	13.12.	20.12.	27.12.	03.01.	10.01.	17.01.	24.01.	31.01.	07.02.
Intro		-	B	E	P	C										
Current BCs		-														
Architectures		-														
Smart Contracts		-		B	E	P	C									
Crypto		-														
The DAO		-			B	E	P	C								
PoW		-														
PoS		-				B	E	P	C							
BFT1		-														
BFT2		-					B	E	P		C					
Scalability		-					B	E	P							
Anonymity		-										B	E	P	C	
Attacks		-														
Networking		-											B	E	P	C
Trusted Execution		-														
Social Impact		-														

B Betreuertreffen

E Erste Abgabe Essay + Dry-Run

P Präsentation

C Abgabe des fertigen Essays

Weihnachtsferien vom 24.12. (So.) bis 07.01. (So.)

Reviews

- Reviews zu den Essays werden von euch erstellt
- Autor, der nächste Woche dran ist, schreibt euer Review
- Die ersten erstellen die Reviews für die letzten
- Beispiel: Architectures → Intro → Social Impact

- Feedback, Verbesserungsvorschläge
- Lob, Kritik

- Abgabe per Mail

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Essay

Wie man einen Vortrag hält

Das ACM Template

Das Konferenz Template

1. Kurzfassung
2. Einführung
3. Inhalt
 - Problem, Motivation, Inhalt
4. Verwandte Arbeiten
5. Zusammenfassung
6. Bibliographie

Weglassen:

- Appendix

Alternate ACM SIG Proceedings Paper in LaTeX Format[†]

[Extended Abstract][†]

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ABSTRACT

This paper provides a sample of a LaTeX document which conforms, somewhat loosely, to the formatting guidelines for ACM SIG Proceedings. It is an alternate style which produces a lighter-looking paper and was designed in response to concerns expressed, by authors, over page-lengths. It complements the document *Author's (Alternate) Guide to Preparing ACM SIG Proceedings Using LaTeX*, and *Latex*. This source file has been written with the intention of being compiled under LaTeX and LaTeX.

The developers have tried to include every imaginable sort of "bells and whistles", such as a subtitle, footnotes on title, subtitle and authors, as well as in the text, and every optional component (e.g. Acknowledgments, Additional Authors, Appendix), and not to mention examples of equations, theorems, tables and figures.

To make best use of this sample document, run it through LaTeX and LaTeX, and compare this source code with the printed output produced by the dvi file. A compiled PDF

[†][Produce the permission block, and copyright information]. For use with SIG-ALTERNATE.CLS. Supported by ACM.

[‡]A full version of this paper is available as *Author's Guide to Preparing ACM SIG Proceedings Using LaTeX*, and *Latex* at www.acm.org/addresses.htm

[§]Dr. Trovato insisted his name be first.

[¶]The secretary discovers any knowledge of this author's activities.

[‡]This author is the one who did all the really hard work.

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version is available on the web page to help you with the "look and feel".

CCS Concepts

•Computer systems organization → Embedded systems; Redundancy; Robotics; •Networks → Network reliability;

Keywords

ACM proceedings, LaTeX, text tagging

1. INTRODUCTION

The proceedings are the records of a conference. ACM seeks to give these conference by-products a uniform, high-quality appearance. To do this, ACM has some rigid requirements for the format of the proceedings documents: there is a specified format (balanced double columns), a specified set of fonts (Arial or Helvetica and Times Roman) in certain specified sizes (for instance, 9 point for body copy), a specified live area (18 × 21.5 cm [7 × 8.5"]) centered on the page, specified size of margins (1.9 cm [0.75"]) top, (2.54 cm [1"]) bottom and (1.9 cm [0.75"]) left and right; specified column width (8.45 cm [3.33"]) and gutter size (.83 cm [3.33]).

The good news is, with only a handful of manual settings[†], the LaTeX document class file handles all of this for you.

The remainder of this document is concerned with showing, in the context of an "actual" document, the LaTeX commands specifically available for denoting the structure of a proceedings paper, rather than with giving rigorous descriptions or explanations of such commands.

2. THE BODY OF THE PAPER

[†]Two of these, the `\numberofauthors` and `\aligncenter` commands, you have already used; another, `\balancelcolumn`, will be used in your very last run of LaTeX to ensure balanced column heights on the last page.



Tipps und Tricks

- Keine Umgangssprache
- Kein Denglisch:
 - geshashed (Hashsumme bilden), geupdated, encrypten
- Keine Wertungen
 - *Sadly*, this didn't work → *However*, this didn't work.
- Wenn Englisch, dann British English
 - So wie damals in der Schule
 - synchronisation, virtualisation, colour, behaviour
- Verbindet Sätze schön
 - However, Furthermore, Additionally, In addition, Hence, Thus
 - and → as well as
- dict.cc und thesaurus.com sind eure Freunde

Grammatik! Wichtig!

- i.e. vs e.g.
 - <http://theoatmeal.com/comics/ie>
- Their, They're, There; Your, You're; Its, It's; Then, Than
 - <http://theoatmeal.com/comics/misspelling>
- Richtige Benutzung von '
 - das ist kein ´ oder ` !
 - <http://theoatmeal.com/comics/apostrophe>
- Kommasetzung
 - Lets eat, grandpa.
- seit, seid; dass, das; wegen dir → deinetwegen
einzigste; zumindestens

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Allgemeines

Essay

Wie man einen Vortrag hält

Generelle Struktur

- Titel, Autor (Wer bin ich?) (1 Folie)
- Motivation (Was möchte ich lösen und warum?) (1-3 Folien)
- Übersicht über den Talk (1 Folie)
- Problembeschreibung (Detailliertes Warum) (1-2 Folien)
- Lösungsansätze (Welche Möglichkeiten gibt es?) (2-3 Folien)
- Die Lösung (Wie hab ich es gelöst?) (3-9 Folien)
- Evaluation (Warum bin ich besser als alle vorher?) (0-4 Folien)
- Weitere Arbeit (Was kann man besser machen?) (0-2 Folien)
- Zusammenfassung (1 Folie)
- Backup (0-∞ Folien)

⇒ 25 Folien für 25 Minuten

Tipps und Tricks

- Auf Details wird geachtet
 - Thema richtig geschrieben? Foliennummern konsistent?
 - Alle Folien mit Name und Thema? Rechtschreibfehler?
- Bilder besser als Text
 - Aber: auch nicht die Zuhörer erschlagen
 - Keine Bilder ohne Erklärungen!
- Nicht mehr als 7 Hauptpunkte pro Folie
- Keine (oder sehr wenig) Effekte
- Hervorhebungen **farblich** oder *textuell*