



Design Science Research

MSc in Computer Science

Giovanna Di Marzo Serugendo

Giovanna.Dimarzo@unige.ch, room B 235, 022 379 00 72

University of Geneva

<http://cui.unige.ch/~dimarzo>



Lecture 4 - Summary

Writing

- Abstracts
- Papers / MSc Thesis



Lecture 5

Writing

- Abstracts
- Papers / MSc Thesis
- 800 Words
- Plagiarism and citations
- Latex



800 Words

Typical template

<https://sites.google.com/a/fac-media.org/awareness/audience-content>

Audience:

- **General** audience – any field or general public (G)
- **Audience in your field** (D)
- **Specialist** in your field (S)

800 Words – The formula (7 paragraphs)

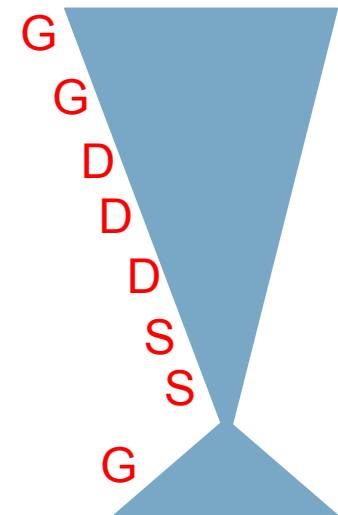
- G, G, D, D, S, S, G

Examples (cf Awareness paper)

<http://www.perada-magazine.eu/>

<http://www.awareness-mag.eu/>

<https://ercim-news.ercim.eu/>





800 Words

Headline*

(General audience)

Keep it **short** (ten words or fewer), straightforward, and as free from jargon as you can. For **non-specialists**, you want to make clear the application/importance of your work, not the specifics (yet!). For example:

Machine intelligence is enhanced using analogue computation



800 Words

Summary*

(General audience)

This is not an abstract, just a single sentence summing up what you will cover in the article and giving the audience a reason to read on: it should be no longer than 35 words. Try not to repeat the headline in the summary. *Please write this section in the third person.* For example:

A new kind of correlation filter used with multi-spectral fingerprint scanner has reduced the time taken to detect false prints by an order of magnitude and improved the performance by 150%.



800 Words

Paragraph 1: The purpose

(General public)

Give the **motivation of your work** and its **potential applications** in a way that the public will be able to understand. Will it help us to build intelligent robots that can clean your house? More secure internet banking? Better understanding of generic drugs? Obviously, there may be many applications you could talk about. If they are broadly similar, give one representative example. If they are disparate, give three.

Please write the main text in the **active voice** where possible, and feel free to write in the first person or first person plural (“we have developed...”). For example:

The x-ray has been in use for a century and has revolutionized medicine, allowing doctors to see inside the body to look at broken bones. With the introduction of barium meals etc., other tissue can be revealed and analyzed...



800 Words

Paragraph 2: The problem

(General technical audience)

Now give **the context of your work for a non-specialist**. To what general **field** or fields (like artificial intelligence or data security) does your work apply, and why is this field **important**? Describe a goal that researchers in the field have been working towards and problems in achieving this goal (some of which you have solved, or are trying to solve, which you will explain in the rest of the article). Remember to spell out all acronyms the first time you use them, and to explain all jargon terms that aren't well understood outside your field. For example:

However using ionizing radiation for body scans has many disadvantages, particularly related to the safety of both medical staff and patients. It would be ideal if we could use visible light instead: it is simple to generate, poses little risk to humans, and can be captured easily using electronic cameras. Unfortunately, however, diffusion of light rays through body tissue mean that the images that emerge are unclear...



800 Words

Paragraph 3: The set up

(General technical audience)

From the issues you described in the first paragraph, now **pick out the ones that concern your work**. How have people tried to solve this/these in the past? Why have these solutions **fallen short**? What is (briefly) **your new solution**? For example:

There have been many approaches to the development of micromechanical structures with very high aspect ratios. Most of those in two dimensions—for instance, as developed by Smith,³ Singh,⁴ and Chao⁵—have problems of low-yield. With three-dimensional techniques, such as ... we find both resolution and sensitivity issues. To get around these problems, we have been working on a new approach called hybrid structure formation (HSF), that attempts to incorporate the advantages of both and the disadvantages of neither.



800 Words

Paragraph 4: Your approach (Audience in your discipline)

Having mentioned **your approach** in the last paragraph, you should now **explain the basic concepts behind it and how it works**. Here you can be a little more technical, but if you use words that can't be looked up in a basic scientific dictionary, add some explanation. For example:

Neuromorphic engineering—the building of brain-like structures in silicon—was originally conceived by Carver Mead at the California Institute of Technology.⁶ It is based on the idea that it is more efficient to use the physics of electronic devices to implement functions directly, rather than to simulate these functions using digital algorithms. This is a particularly advantageous approach for building neural systems as the functions that transistors perform naturally are qualitatively very similar to those in biological neurons...



800 Words

Paragraphs 5-7: What you've done

(Audience in your discipline for paragraph 5, moving to a specialist audience for 6 and 7)

This is the most straightforward section of the article, and the one that is least likely to be a problem. Go through **what you've done**, **what your results were**, and **what your results mean**. Just start off on the less technical side so that those that aren't right in your field can grasp the basics what you're trying to do: even if they don't understand the full details as you progress.



800 Words

Paragraph 8: Conclusion/further work

(General technical audience)

Go back and remind us of the application, the problem with it (without restating from scratch), and explain how the work you've just described has moved things on. Then tell us how you think you can make even further progress. For example:

To make the types of three-dimensional structures we need for next-generation batteries and other devices, the use of surfactants as templates seems promising. So far our results have shown that we can easily make structures at the right scale (5-10nm), in the right types of patterns (such as hexagonal cells), and that are solid enough to be viable in real devices. Our next step will be to show that the new materials can be fabricated in large-enough slabs to be useful in macroscopic products.



ERCIM News Guidelines

Other examples:

<https://ercim-news.ercim.eu/call#guidelines>

Title

Author (full name, max. two or three authors)

Teaser:

a few words about the project/topic. Printed in bold face, this part is intended to raise interest (keep it short).

Details describing:

- what the project/product is
- which institutions are involved
- where it takes place
- why the research is being done
- when it was started/completed the aim of the project
- the techniques employed
- the orientation of the project
- future activities
- other institutes involved in this project
- co-operation with other ERCIM members in this field



ERCIM News Guidelines

References:

1 - max. 3 references are mandatory for special theme articles. For articles for the section "Research and Development", you can give up to three references (not mandatory)

Authors should preferably refer important sources only (i.e. journal papers, books) and avoid meaningless references such as article in preparation, unpublished presentations, personal communications, research reports, patents, or local conference publications not listed in the major scientific digital libraries (such as IEEE, ACM, Springer).

The selected EN style is the shortened IEEE Citation Style.

The references should be as concise as possible and restricted to the minimal information needed. Avoid all unnecessary words (pages x pp., year, editors, location,...). Use acronyms instead of full conference names - OOPSLA x Object-Oriented Programming Systems, abbreviations (e.g. Conf. x Conference, IEEE TPAMI x IEEE Transaction on Pattern Analysis and Machine Intelligence, etc.).

Use et al. when three or more names are given.

Useful Link(s) (URLs separated from the references)

Contact address with:

- full name of the author
- phone number
- e-mail address

Photos, illustrations:

ERCIM News is a full-color print magazine. Each article should be accompanied by an illustration (photos, graphics), for example of the product, applications mentioned in the article, people working on the project, etc. (avoid as much as possible flow charts and screen dumps).

Photos should be submitted in jpg or tiff format in a resolution suitable for printing (pictures taken from the web are usually in a quality suitable for printing), graphics in a vector format (svg, eps or ps).



Coursework 2 – 800 Words

- Choose a topic (ideally your MSc project)
- Analyse literature and shortcomings
- Discuss your proposal
- Discuss your methodology of research
- Foresee how you will evaluate your results
- Conclude
- References
- Follow 800 words template
 - Lecture 5
- **Deadline: December 15th**
- **Submit to Compilatio.net - No plagiarism allowed**
- **No summary of existing paper allowed**



5 Levels of Plagiarism (IEEE)

1. Uncredited verbatim copying of a full paper.
2. Uncredited verbatim copying of a large portion (up to half) of a paper.
3. Uncredited verbatim copying of individual elements such as words, sentences, paragraphs, or illustrations.
4. Uncredited improper paraphrasing of pages or paragraphs (by changing a few words or phrases or rearranging the original sentence order).
5. Credited verbatim copying of a major portion of a paper without clear delineation of who did or wrote what.

- May apply to our own work
- May apply to choice and organisation of literature review
- Applies to figures (even creative commons)

Uncredited: no citation to the original work

Verbatim: exact words/sentences



Citations and references

Literature review / State of the art

- Do not copy sentences from original paper
- Explain the work with your own words
- Add a **citation** in the text and a **reference** in the bibliography

Quoting

- You want to use the exact words of the original paper (it highlights your own discussion)
- Use “ ” and add a citation and reference



Citations

Simple citations

Numerous studies and publications show that the major focus has tended to be on the development of tests (Bachman, 1990).

- Name of original author is in the reference + work described with our own words

According to

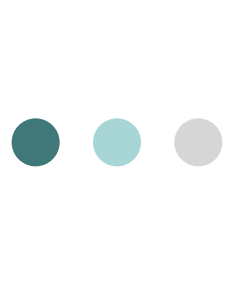
Smith (1994) proposes that: "what is needed is to take account of multiple perspectives - of participants or stakeholders with acceptability and success being matters of degree, and related to users in context." He believes that both insiders and outsiders should be involved in the evaluation process.

- Name of original author is in the sentence + quotes + own words

Secondary citations

Self-access centres (SACs), as examples of *post-industrial initiatives* (Heuring, 1997 quoting Toffler, 1980) that allow for flexible access to learning resources, are playing an increasingly central role in educational systems - particularly in Europe and Asia.

- Shows whose ideas we are citing (Toffler), and where we read about them (Heuring). In the references, mention only Heuring (we have not read the other)



Citation / References - alternatives

Books

Quirk, R., & Greenbaum, S. (1973) *A University Grammar of English*. London: Longman.

Article in journals

Morrison, B. J. (1995). Working in groups in Beijing & Hong Kong: experience of a group-access approach to language learning. *In Hong Kong Polytechnic University: Working Papers in ELT & Applied Linguistics* 1(1) (pp. 105-118). Hong Kong: Hong Kong Polytechnic University.

Article in edited volume or proceedings

Fitzgerald, S., Morrall, A., & Morrison, B. (1996). Catering for individual learning styles: experiences of orienting students in an Asian self-access centre. In L. Dickinson (ed.), *Proceedings of the International Conference Autonomy 2000: The Development of Learning Independence in Language Learning*" (pp. 55-69). Bangkok, Thailand: The British Council.

Web reference

<http://vlc.polyu.edu.hk/AcademicWriter/Evidence/citations.htm> (last accessed October 14th, 2012)



Citation / References - alternatives

Simple citations

Specialised books propose a grammar of English [1].

References

[1] Quirk, R., & Greenbaum, S. *A University Grammar of English*. London: Longman. 1973.

.



Citation styles

Computer Science Style Guide Suggestions

Collect a basic set of information for each one of your references, and then format this information to match an accepted Bibliographic Style (ACM, APA or IEEE). On this page you will find a list of the information that is needed, along with several examples.

ACM = Association of Computing Machinery

Sample citation [Phillips 2001] -- List References alphabetically, using the author's last name.

APA = American Psychology Association

Sample citation (Raskin, 2002) -- List References alphabetically, using the author's last name.

IEEE = Institute of Electrical and Electronics Engineers

Sample citations [1] or [8, 10] -- List References numerically, in the order that you have cited them.

<http://guides.library.dal.ca/c.php?g=257109&p=1717772>



IEEE citation style

Examples of citations for different materials:

<https://pitt.libguides.com/citationhelp/ieee>

Book in print

[1] B. Klaus and P. Horn, *Robot Vision*. Cambridge, MA: MIT Press, 1986.

Chapter in book

[2] L. Stein, "Random patterns," in *Computers and You*, J. S. Brake, Ed. New York: Wiley, 1994, pp. 55-70.

eBook

[3] L. Bass, P. Clements, and R. Kazman, *Software Architecture in Practice*, 2nd ed. Reading, MA: Addison Wesley, 2003. [E-book] Available: Safari e-book. **Journal article**

[4] J. U. Duncombe, "Infrared navigation - Part I: An assessment of feasibility," *IEEE Trans. Electron. Devices*, vol. ED-11, pp. 34-39, Jan. 1959.

eJournal (from database)

[5] H. K. Edwards and V. Sridhar, "Analysis of software requirements engineering exercises in a global virtual team setup," *Journal of Global Information Management*, vol. 13, no. 2, p. 21+, April-June 2005. [Online]. Available: Academic OneFile, <http://find.galegroup.com>. [Accessed May 31, 2005].



IEEE citation style

Examples of citations for different materials:

eJournal (from internet)

- [6] A. Altun, "Understanding hypertext in the context of reading on the web: Language learners' experience," *Current Issues in Education*, vol. 6, no. 12, July 2003. [Online]. Available: <http://cie.ed.asu.edu/volume6/number12/>. [Accessed Dec. 2, 2004].

Conference paper

- [7] L. Liu and H. Miao, "A specification based approach to testing polymorphic attributes," in *Formal Methods and Software Engineering: Proceedings of the 6th International Conference on Formal Engineering Methods, ICFEM 2004, Seattle, WA, USA, November 8-12, 2004*, J. Davies, W. Schulte, M. Barnett, Eds. Berlin: Springer, 2004. pp. 306-19.

Conference proceedings

- [8] T. J. van Weert and R. K. Munro, Eds., *Informatics and the Digital Society: Social, ethical and cognitive issues*: IFIP TC3/WG3.1&3.2 Open Conference on Social, Ethical and Cognitive Issues of Informatics and ICT, July 22-26, 2002, Dortmund, Germany. Boston: Kluwer Academic, 2003.

See all: <https://pitt.libguides.com/citationhelp/ieee>



Not to do

Avoid

[1] propose a grammar of English.

Work of [1] propose a grammar of English.

In [1] the authors propose a grammar of English.

The authors of [1] propose a grammar of English

Replace

Quirk et al. [1] propose a grammar of English

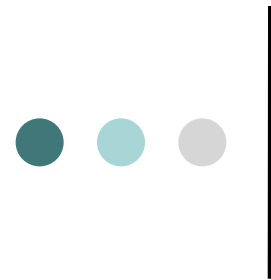
Specialised books propose a grammar of English [1].



Summary

Writing

- 800 Words
- Plagiarism and citations



Latex – style and bib

Choose a latex editor / compiler

https://www.overleaf.com/learn/latex/Choosing_a_LaTeX_Compiler

For instance:

Overleaf.com

Texshop

Documentation Home
Learn LaTeX in 30 minutes

Overleaf guides

Creating a document in Overleaf
Uploading a project
Copying a project
Creating a project from a template
Including images in Overleaf
Exporting your work from Overleaf
Working offline in Overleaf
Using Track Changes in Overleaf
Using bibliographies in Overleaf
Sharing your work with others
Debugging Compilation timeout errors
How-to guides

LaTeX Basics

Creating your first LaTeX document
Choosing a LaTeX Compiler
Paragraphs and new lines

🔍 Search help library....

Choosing a LaTeX Compiler

The styles, contents and layout in a \LaTeX document are defined by means of *tags* or *commands* in a plain .tex file, this file can be used to generate several types of "human-readable" versions of the document. The easiest way to generate this final output is to use **Overleaf**. Overleaf has a ready-to-use \LaTeX distribution and final documents can be generated by simply clicking the "Recompile" button; if this is your case you can skip this article. Otherwise, if you need to learn how to compile documents in your computer, this article describes how to generate PS, DVI and PDF output from a \LaTeX file.

Contents

- 1 Introduction
- 2 TeX distributions
- 3 LaTeX editors
- 4 Output formats
- 5 Other compilers
- 6 Compiling documents with cross-references

https://www.overleaf.com/learn/latex/Choosing_a_LaTeX_Compiler

Overleaf – shared env.

The screenshot displays the Overleaf web interface for a LaTeX document titled "Paper Dicty: Stream breaking 2". The interface is divided into three main sections: a file explorer on the left, a source code editor in the center, and a preview window on the right.

File Explorer (Left): Shows a project structure with folders "Code", "img", and "Validation". The "main.tex" file is selected and highlighted in green.

Source Code Editor (Center): Displays the LaTeX source code for "main.tex". The code includes package declarations, a title, author information, and an abstract. The title is "Self-organising Agent-Based Model to Study the Relationship Between Cells Density and Stream-breaking Phenomenon During Aggregation Phase of *Dictyostelium discoideum*". The author is "Mohammad Parhizkar^{1†}, Jahn Nitschke², Louis Hellequin³, Thierry Soldati⁴, Giovanna Di Marzo Serugendo⁵".

Preview Window (Right): Shows the rendered PDF output of the document. The title is "Self-organising Agent-Based Model to Study the Relationship Between Cells Density and Stream-breaking Phenomenon During Aggregation Phase of *Dictyostelium discoideum*". The author is "Mohammad Parhizkar^{1†}, Jahn Nitschke², Louis Hellequin³, Thierry Soldati⁴, Giovanna Di Marzo Serugendo⁵". The abstract is "Collective behaviour (robotics), due to their mechanistic haviour to arise from a relatively simple social amoeba *Dictyostelium discoideum* in artificial systems. In this paper, we study the life cycle of *D. discoideum* and its 3',5'-cyclic adenosine monophosphate (cAMP) signaling pathway, which explains three main elements explaining stream-breaking phenomenon: (1) identifying threshold of counting factor (CF) the back of the stream; (2) emergence of streams depends on cell density, experiments, which shows the slug formation phase of the *D. discoideum*." The keywords are "Bio-inspired Swarm Robotics, Quorum Sensing, Interference".

TeXShop - local

The screenshot displays the TeXShop application window. The top menu bar includes File, Edit, Source, Macros, Typeset, Preview, Window, and Help. The main window is split into two panes. The left pane shows the LaTeX source code for a document titled 'Main.tex'. The right pane shows the rendered PDF output of the same document.

Left Pane (Source Code):

```

1 \documentclass[11pt]{IEEEtran}
2 \IEEEtranMetadata{
3 % The following line is needed to identify funding in the first footnote. If that is unneeded, please comment it
4 out.
5 \usepackage{multicol,blindtext}
6 \usepackage{xcolor}
7 \usepackage{comment}
8 \usepackage{lipsum}
9 \usepackage{multicol,blindtext}
10 \usepackage{xcolor}
11 \usepackage{comment}
12 \usepackage{lipsum}
13
14
15 \def\BibTeX{{\rm B}kern-.05em{\sc i}kern-.025em b}kern-.08em
16 Tkern-.1667emVower.7ex\hbox{E}kern-.125emX}}
17 \begin{document}
18
19 \title{Methods, Frameworks and Design Patterns for Higher-Order Emergence of Collective behaviours: A case
20 study for
21 %Multicellular Development in
22 Social Amoeba {\textit{Dictyostelium Discoideum}}*\\
23 {\footnotesize \textsuperscript{*}}Note: Sub-titles are not captured in Xplore and
24 %should not be used
25 }
26 \thanks{Identify applicable funding agency here. If none, delete this.}
27
28 \author{\IEEEauthorblockN{1\textsuperscript{st}} Mohammad Parhizkar}
29 \IEEEauthorblockA{\textit{Centre Universitaire d'Informatique}}\textit{Geneva School of Social Sciences}}\\
30 \textit{University of Geneva}\\
31 Geneva, Switzerland \\
32 Mohammad.Parhizkar@unige.ch}
33 \and
34 \IEEEauthorblockN{2\textsuperscript{nd}} Giovanna Di Marzo Serugendo}
35 \IEEEauthorblockA{\textit{Centre Universitaire d'Informatique}}\textit{Geneva School of Social Sciences}}\\
36 \textit{University of Geneva}\\
37 Geneva, Switzerland \\
38 Giovanna.DiMarzo@unige.ch}

```

Right Pane (Rendered PDF):

Methods, Frameworks and Design Patterns for Higher-Order Emergence of Collective behaviours: A case study for Social Amoeba *Discoideum**

1st Mohammad Parhizkar 2nd Giovanna Di Marzo Serugendo
Centre Universitaire d'Informatique *Centre Universitaire d'Informatique* *LIRIS-CI*
Geneva School of Social Sciences *Geneva School of Social Sciences*
University of Geneva
Geneva, Switzerland
 Mohammad.Parhizkar@unige.ch Giovanna.DiMarzo@unige.ch

Abstract—Collective behaviour in nature provides a source of inspiration for engineering artificial systems (e.g. robotics, ecosystems of services), due to their inherent mechanisms favouring adaptation to environmental changes and enabling complex emergent behaviour to arise from a relatively simple behaviour of individual entities. The first-order emergence also referred to as swarm intelligence, is well studied, while higher-order levels of emergent behaviour have not received much attention yet. Second-order emergent behaviour arises from the interactions of individuals, which are themselves the result of first-order emergent behaviour. Engineering of the mechanisms for modelling the first-order emergence is well studied and identified, such as gradient, repulsion or ant foraging, but not yet for the second- or higher-order emergence. We investigate the relations and transitions from first-order to higher-order collective behaviours. We propose in this paper a method for analysing and modelling first- and higher-order emergence in collective systems. This method relies on two frameworks: the Generic Emergence Framework (GEF) for shaping different levels of emergence and the MASQ quadrants for shaping individual, collective agent behaviour. They help design agent-based models, in particular, to discriminate first- from second-order behaviour, and identify triggers of change (GEF); to identify internal states, individual behaviours, interactions and emerging properties of both first- and second-order (MASQ). We show how to apply the method, the frameworks and how to derive models of both first- and second-order emergence on the specific case of *Dictyostelium discoideum*. *D. discoideum* is a social amoeba able to change its behaviour to survive in response to nutrient starvation. Individual cells move around on their own when there is plenty of food. When food is scarce, cells self-aggregate towards a leading centre cell (first-order emergent behaviour) to build a super-organism, similar to a slug. This super-organism presents a system at a level of complexity more significant than an individual cell, without the complexity of a nervous system. In spite of the fact that, the slug's behaviour is due to the collective behaviour of the

Index Terms—Collective behaviour, *Dictyostelium discoideum*, emergent systems, organising Systems, HI

Understanding collective links to the engineering attracts many research swarm robotics. It in topics such as cell biological swarms of drones, collective adaptive systems deployment. For instance, haviours; biomedicine from nature to design human bodies. In collective also referred to as swarm behaviour of individual phenomena at the global emergent behaviour, also from the interactions result of first-order emergent



Set up your files in a folder

Name	Date Modified
figures	Jul 10, 2015 4:08 PM
IEEEtran.bst	Jan 11, 2007 10:15 AM
IEEEtran.cls	Nov 27, 2012 8:32 PM
IEEEtranS.bst	Jan 11, 2007 10:16 AM
workshop2015.aux	Aug 10, 2015 8:10 PM
workshop2015.bbl	Aug 10, 2015 8:04 PM
workshop2015.bib	Aug 10, 2015 8:04 PM
workshop2015.blg	Aug 10, 2015 8:04 PM
workshop2015.log	Aug 10, 2015 8:10 PM
workshop2015.pdf	Aug 10, 2015 8:10 PM
workshop2015.synctex.gz	Aug 10, 2015 8:10 PM
workshop2015.tex	Aug 10, 2015 10:26 PM
workshop2015.texnicle	Jul 10, 2015 3:47 PM



Bibtex - examples

.bib

```
@inproceedings{Parhizkar:15:SADDISR,  
  title = {{Social Amoeba Dictyostelium Discoideum  
    as an Inspiration for Swarm Robotics}},  
  year = {2015},  
  booktitle = {IEEE 9th International Conference on  
    Self-Adaptive and Self-Organizing Systems  
    (SASO), 2015},  
  author = {Parhizkar, Mohammad and Di Marzo  
    Serugendo, Giovanna},  
  pages = {162--163}  
}
```

.tex

The work reported in this paper is part of a larger research project, in which we aim at deriving engineering principles inspired by `\textit{Dictyostelium discoideum}` to develop collective adaptive artificial systems (e.g. swarm robotics)~\cite{Parhizkar:15:SADDISR}.



Bibtex - examples

.pdf (text)

The work reported in this paper is part of a larger research project, in which we aim at deriving engineering principles inspired by *Dictyostelium discoideum* to develop collective adaptive artificial systems (e.g. swarm robotics) [25]. During the transition from growth to de-

.pdf (references)

[25] Mohammad Parhizkar and Giovanna Di Marzo Serugendo. Social Amoeba *Dictyostelium Discoideum* as an Inspiration for Swarm Robotics. In *IEEE 9th International Conference on Self-Adaptive and Self-Organizing Systems (SASO)*, 2015, pages 162–163, 2015.



Latex templates

See Latex Templates on Moodle



References

Vijay K. Vaishnavi, William Kuechler Jr, Design Science Research Methods and Patterns – Innovating Information and Communication Technology. Auerbach Publications, 2008

Tutorial on research methods http://win.ua.ac.be/~sdemey/Tutorial_ResearchMethods/

Robert K. Yin. Case Study Research: Design and Methods, Applied Social Research Methods Series, Vol. 5, Sage Publications, 2003

Empirical research methods, how to be rigorous in experimentation -
<http://www.cs.jhu.edu/~nasmith/erm/>

Hevner et al. Design Science in IS Research. MIS Quarterly, 28(1), 2004

Reading and writing papers
<http://datasearch.ruc.edu.cn/course/researchmethod/computermethod.html>

Edward de Bono. Lateral Thinking. Penguin Books, 1990.

Descriptive vs Informative Abstracts
www.cognitrix.com/pages/tips-hints/abstracts.pdf

Abstracts

<http://writingcenter.unc.edu/handouts/abstracts/>



References

Plagiarism

<http://www.csee.umbc.edu/~pmundur/courses/CMSC691M-04/IEEE-plagiarism-defn.html>

How to cite

<http://owl.english.purdue.edu/owl/resource/747/02/>

<http://vlc.polyu.edu.hk/AcademicWriter/Evidence/citations.htm>

Passive vs Active Voice

- <http://www.dailywritingtips.com/passive-vs-active-voice/>
- <http://owl.english.purdue.edu/owl/resource/539/1/>