# CS 538 Lecture Notes

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Nom de l'institution

Abstract. Ici va le résumé

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#### Introduction

The fact that 'whites' can have a winning strategy in a gobang situation of this kind, if the starting player has one on the geography graph, can be made clear in the following way:

- 1. In the manner described in FIG. 1, we can first of all be forced to occupy a very definite point in the constructed gobang situation, namely the point which is to be assigned to the initial point s. The latent threats of points [5] and [6] are given by two angles as shown in FIG. 1
- 2. Only after a player has a point of the type [2] in FIG. 7 or FIG. 8, the other player has the choice to respond either to [3] or to [4], since the opponent is forced to return to the opponent can be.

- 2
- 3. After having set white to a point [4] in FIG. 9 (or FIG. 10) 'Black' can only renew the pulling force if 'White' has not yet played on the corresponding point [2]. Otherwise, 'Black' may lose, since 'White' now has the opportunity to put the point of the kind [6] of Fig. 1 always. Therefore, 'White' wins. Similarly, 'black' can win if the game is on an already occupied node of  $V_2$
- 4. By setting along a chain as in FIG. 1, chains of three stones of the same color are continuously formed. If a player threatens to lose, the possibility of the opponent to train a certain train through the formation of quadruplets opens up to him. Thus, for example, 'Wei' can answer this train by setting to [2a], for example, in Fig. 1 after 'Schwarz' has set it there [2]. Will not 'Black' lose in the next train, he must then put on [2]. In this way one can see that this deviation from the game along the chains has no advantage: If a player departs, the opposing player has a double-sided open three-string. This means that the deviating player, as long as he is not next to the threestring, must be threatened with the victory on the next turn. The proof that such threats are exhausted after a number of successes which are unsuccessful are fundamentally simple, but muddle.

#### 1 Première section

Vous trouverez des informations pertinentes concernant ce gabarit (en anglais) dans le reste de ce document.

The LaTeX source of this instruction file for LaTeX users may be used as a template. This is located in the "authors" subdirectory in ftp://ftp.springer.de/ pub/tex/latex/llncs/latex2e/instruct/ and entitled typeinst.tex. There is a separate package for Word users. Kindly send the final and checked source and PDF files of your paper to the Contact Volume Editor. This is usually one of the organizers of the conference. You should make sure that the LATEX and the PDF files are identical and correct and that only one version of your paper is sent. It is not possible to update files at a later stage. Please note that we do not need the printed paper.

Headings. Headings should be capitalized (i.e., nouns, verbs, and all other words except articles, prepositions, and conjunctions should be set with an initial capital) and should, with the exception of the title, be aligned to the left. Words joined by a hyphen are subject to a special rule. If the first word can stand alone, the second word should be capitalized.

Here are some examples of headings: "Criteria to Disprove Context-Freeness of Collage Language", "On Correcting the Intrusion of Tracing Non-deterministic Programs by Software", "A User-Friendly and Extendable Data Distribution System", "Multi-flip Networks: Parallelizing GenSAT", "Self-determinations of Man".

Lemmas, Propositions, and Theorems. The numbers accorded to lemmas, propositions, and theorems, etc. should appear in consecutive order, starting with Lemma 1, and not, for example, with Lemma 11.

#### 1.1 Figures

For IATEX users, we recommend using the *graphics* or *graphicx* package and the \includegraphics command.

Please check that the lines in line drawings are not interrupted and are of a constant width. Grids and details within the figures must be clearly legible and may not be written one on top of the other. Line drawings should have a resolution of at least 800 dpi (preferably 1200 dpi). The lettering in figures should have a height of 2 mm (10-point type). Figures should be numbered and should have a caption which should always be positioned *under* the figures, in contrast to the caption belonging to a table, which should always appear *above* the table; this is simply achieved as matter of sequence in your source.

Please center the figures or your tabular material by using the \centering declaration. Short captions are centered by default between the margins and typeset in 9-point type (Fig. 1 shows an example). The distance between text and figure is preset to be about 8 mm, the distance between figure and caption about 6 mm.

To ensure that the reproduction of your illustrations is of a reasonable quality, we advise against the use of shading. The contrast should be as pronounced as possible.

If screenshots are necessary, please make sure that you are happy with the print quality before you send the files.

Please define figures (and tables) as floating objects. Please avoid using optional location parameters like "[h]" for "here".

Remark 1. In the printed volumes, illustrations are generally black and white (halftones), and only in exceptional cases, and if the author is prepared to cover the extra cost for color reproduction, are colored pictures accepted. Colored pictures are welcome in the electronic version free of charge. If you send colored figures that are to be printed in black and white, please make sure that they really are legible in black and white. Some colors as well as the contrast of converted colors show up very poorly when printed in black and white.

# 1.2 Formulas

Displayed equations or formulas are centered and set on a separate line (with an extra line or halfline space above and below). Displayed expressions should be numbered for reference. The numbers should be consecutive within each section or within the contribution, with numbers enclosed in parentheses and set on the right margin — which is the default if you use the *equation* environment, e.g.,

$$\psi(u) = \int_{0}^{T} \left[ \frac{1}{2} \left( \Lambda_o^{-1} u, u \right) + N^*(-u) \right] dt . \tag{1}$$

#### 4 Nom de l'auteur

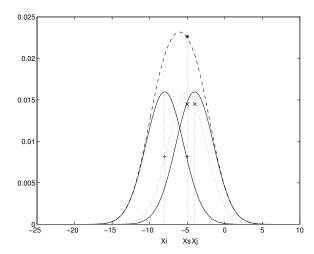


Fig. 1. One kernel at  $x_s$  (dotted kernel) or two kernels at  $x_i$  and  $x_j$  (left and right) lead to the same summed estimate at  $x_s$ . This shows a figure consisting of different types of lines. Elements of the figure described in the caption should be set in italics, in parentheses, as shown in this sample caption.

Equations should be punctuated in the same way as ordinary text but with a small space before the end punctuation mark.

#### 1.3 Footnotes

The superscript numeral used to refer to a footnote appears in the text either directly after the word to be discussed or – in relation to a phrase or a sentence – following the punctuation sign (comma, semicolon, or period). Footnotes should appear at the bottom of the normal text area, with a line of about 2 cm set immediately above them.<sup>1</sup>

## 1.4 Program Code

Program listings or program commands in the text are normally set in typewriter font, e.g., CMTT10 or Courier.

## 2 Deuxième section

### 2.1 ainsi de suite...

Example of a Computer Program

<sup>&</sup>lt;sup>1</sup> The footnote numeral is set flush left and the text follows with the usual word spacing.

```
program Inflation (Output)
  {Assuming annual inflation rates of 7%, 8%, and 10%,...
   years);
   const
     MaxYears = 10;
   var
     Year: 0..MaxYears;
     Factor1, Factor2, Factor3: Real;
   begin
     Year := 0;
     Factor1 := 1.0; Factor2 := 1.0; Factor3 := 1.0;
     WriteLn('Year 7% 8% 10%'); WriteLn;
     repeat
       Year := Year + 1;
       Factor1 := Factor1 * 1.07;
       Factor2 := Factor2 * 1.08;
       Factor3 := Factor3 * 1.10;
       WriteLn(Year:5,Factor1:7:3,Factor2:7:3,Factor3:7:3)
     until Year = MaxYears
end.
```

(Example from Jensen K., Wirth N. (1991) Pascal user manual and report. Springer, New York)