

# Spatial Clustering Algorithms: A Selective Survey

Baskin, Sean  
Reinsmidt, Eric  
Sidella, Pallavi

Department of Engineering and Computer Science  
University of Tennessee at Chattanooga  
Chattanooga, Tennessee, U.S.A.

**Abstract**—Please include a brief abstract here. The abstract should be limited to 50-200 words and should concisely state what was done, how it was done, principal results, and their significance.

## I. INTRODUCTION

This LaTeX template provides authors with most of the formatting specifications (e.g. margins, column widths, line spacing, and text fonts) needed for preparing electronic versions of their papers. Please do not alter any of the formatting in this template when you prepare your paper.

## II. ASYMPTOTIC EVALUATION

AP-S summary papers are limited to two pages. Any submitted paper that exceeds this limit will be rejected. The page format is two-column, as illustrated here. Do not add any kind of pagination anywhere in the paper. Do not manually number the headings - the template will do that for you. Please take note of the following items when preparing your paper:

A. *DBSCAN*

B. *BIRCH*

C. *Fuzzy C-Means*

D. *Headings*

Primary section headings within the paper are enumerated by Roman numerals and are centered above the text. Secondary section headings are enumerated by capital letters followed by periods (“A.”, “B.”, etc.) and are flush left above their sections. The first letter of each word is capitalized. Tertiary section headings are enumerated by Arabic numerals followed by a parenthesis. They are indented, run into the text in their sections, and are followed by a colon.

E. *Equations*

All equations should be labeled in consecutive numerical order. Equation numbers, within parentheses, should be aligned on the right side of the column, as in (1), using a right tab stop. Punctuate equations with commas or periods when they are part of a sentence, as in

$$\alpha + \beta = \chi \quad (1)$$

Be sure that the symbols in your equation have been defined before or immediately following the equation. Use “(1)”, not “Eq. (1)” or “equation (1)”, except at the beginning of a sentence: “Equation (1) is . . .”

F. *Figures and Tables*

Place each figure and/or table within the width of a single column, as illustrated by Fig. 1 and Table I below. Large figures and tables may span across both columns. Figure captions should be below the figures; table headings should appear above the tables. Insert figures and tables after they are cited in the text.

TABLE I  
EXAMPLE OF A TABLE CAPTION.

Table Column Head 1	Table Column Head 2	Table Column Head 3
Item 4	Item 5	Item 6
Item 7	Item 8	Item 9

G. *Abbreviations and Acronyms*

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract.

H. *Units and Numbers*

The International System of Units (SI units) is advocated for use in IEEE publications. Unit symbols should be used with measured quantities, i.e., 1 mm, but not when unit names are used in text without quantities, i.e., “a few millimeters.” Use a zero before decimal points: “0.25”, not “.25”.

I. *References*

All references should be labeled in consecutive numerical order [1]-[3]. When citing references within the text, refer simply to the reference number enclosed by square brackets, as in [1]. Do not use “Ref. [1]” or “reference [1]” except at the beginning of a sentence: “Reference [1] was the first” A numbered list of references must be provided at the end of the paper. The list should be arranged in the order of citation in text, not in alphabetical order. Each reference should be given a unique reference number. Include all authors’ names on a paper in the reference list; do not use “et al.”. Papers that have not been published, even if they have been submitted for publication, should be cited as “unpublished” [3]. Papers that have been accepted for publication should be cited as “in press”. Capitalize only the first word in a paper title, except for proper nouns and element symbols.

### III. EMPIRICAL EVALUATION

A. *Testing Environment*

B. *Results*

### IV. DISCUSSION AND CONCLUSION

#### ACKNOWLEDGEMENT

An acknowledgement statement, if applicable, goes here.

#### REFERENCES

- [1] G. Eason, B. Noble, and I. N. Sneddon, "On certain integrals of Lipschitz-Hankel type involving products of Bessel functions", *Phil. Trans. Roy. Soc. London*, vol. A247, pp. 529-551, April 1955.
- [2] J. Clerk Maxwell, *A Treatise on Electricity and Magnetism*, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp. 68-73.
- [3] J. Doe, "Title of paper if known", unpublished.