







**Style Notes**

–Refer to ACM (Association for Computing Machinery), *Handbook of Technical Writing* (St. Martin's Press), *Science and Technical Writing* (Routledge), and *A Manual for Writers of Term Papers, Thesis, and Dissertations* (Turabian – in Bookstore) for commonly accepted standards for technical writing:

**I. Text Justification and Hyphenation**

A.

## PROSPECTUS GUIDELINES

appropriate paper for archiving purposes is considerably more expensive than that used for every day printing needs, so you should not print your final copy on this paper until cleared to do so by the School of Computing Office.

### IV. Margins

A. A margin of 1 1/2" on the left (or **slightly** greater) is absolutely necessary for binding purposes. Top, bottom and right margins should be  $\geq 1$ ". Pagination goes in the bottom margin 1/2" from the bottom of each page.

B. For widows and orphans:

If the first line of a new paragraph would come at the bottom of a page, simply put it on the next page leaving an extra space between text and pagination at the bottom of the preceding page.

If the last line of a paragraph would come at the top of the next page, put the last two lines of the paragraph at the top of the next page leaving an extra space between text and pagination at the bottom of the preceding page.

C. For the prospectus title page:

Center the text on the page with 2 1/2" margins at the top and bottom. See the sample title page for an example.

D. For titled pages; namely, the first page of each major component (e.g., CONTENTS, REFERENCES) and the first page of each chapter in the text body:

Increase the top margin to 1 1/2" above the title. See the samples for examples. When double-spacing, you may use 4 extra lines (single-spaced) above the title information to correspond to the normal double-space advance.

### V. Style Notes

A. Preface material, in the manner indicated on the "SAMPLE:" pages that follow

Title page - within groupings as indicated on the SAMPLE: TITLE PAGE

\* Table of contents - as illustrated on the SAMPLE: TABLE OF CONTENTS

\* List of tables - same format as for the list of figures

\* List of figures - as illustrated on the SAMPLE: LIST OF FIGURES

\* For these, single spacing is used only on items needing more than 1 line of text



# PROSPECTUS GUIDELINES

## PROSPECTUS GUIDELINES

If the reference has no identified author, use an abbreviation of the reference

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## Chapter 1

## INTRODUCTION

Raster feedback algorithms were initially formulated in conjunction with the AZ10 project [Williams02] as the most promising means of achieving true parallelism in black box processors. A black box processor is one that "has known response characteristics for specific inputs, but which may behave unpredictably in other circumstances" [French96, page 14]. While a number of techniques have been developed for the analysis of raster feedback algorithms [e.g., Henry03A, Tsou04], very little is known regarding accomplishing the analysis in real time. Since raster feedback algorithms are normally considered only in the true parallel context, construction of effective analytical techniques for real-time function has proven to be an elusive research goal to date [Anraha05].

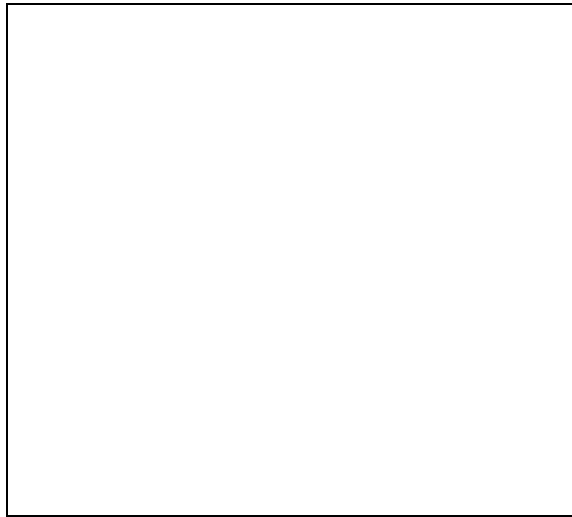
In this paper, we approach the problem from a more restrictive viewpoint; namely, . . .

. . . .

. . . in a recent article on rastering techniques . . .

. . . .

of [Tsou04]. This solution has weaknesses that can be partially addressed if the problem is approached via the tactic of partially parallel implementation.



This demonstrates the viability of the paradigm ...

. . .

. . . leading on to the conclusion that not every approach is reasonable.

The PMX workstation used for the experiment was programmed in the most recent revision of PP-C [PP-C03]. Others [Kuthbert04, PMX Experimentation02, Thornton04] have conducted experiments similar to ours, but ...





REFERENCES

Print Publications:

[Anraha05]

Anraha, T. L and G. T. Smith, "Real-time Anomalies in Processing Feedback Algorithms," IEEE Transactions on Parallel Computing 3, 2 (2005), pp. 78-85.

[ANSI89]

American National Standards Institute, American National Standard Programming Language PP-C, ANSI X7.29, New York, 1989.

[Culloghtsen97]

Culloghtsen, S. S., "A Simple Approach to Rastering Analysis," Rastering Analysis, C. H. Vick, ed., McGraw-Hill, New York, 1997, pp. 87-92.

[French96]

French, A. B., Black Box Systems and Algorithms, Arguile and Sons, Paris, 1996.

[Gargantus prep]

Gargantus, N. F., "Real-Time Semi-rastered Analytical Inversions for MK-series Processors," accepted for publication subject to revision in IEEE Transactions on Parallel Computing, contact AG Enterprises, Inc., 132 North Ridge Circle, Salmonville, WA 87321.

[Henry03A North Ridge .10.

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[Tsou04]  
Tsou, A. K., R. C. Calumbe, and K. L. Taylor, "A Static Approach to the Analysis of

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