

Supercomputer Hardware Fault Detection

Josh Thompson¹, David W. Dreisigmeyer^{*,2}, and Michael Kirby¹

¹Colorado State University, Department of Mathematics

²University of Pittsburgh, Department of Mathematics

February 3, 2010

Summary

The summary is an essential part of your MCM/ICM paper. The judges place considerable weight on the summary, and winning papers are often distinguished from other papers based on the quality of the summary.

To write a good summary, imagine that a reader will choose whether to read the body of the paper based on your summary: Your concise presentation in the summary should inspire a reader to learn about the details of your work. Thus, a summary should clearly describe your approach to the problem and, most prominently, your most important conclusions. Summaries that are mere restatements of the contest problem, or are a cut-and-paste boilerplate from the Introduction are generally considered to be weak.

Each Summary Sheet should include:

- Restatement and clarification of the problem: State in your own words what you are going to do.
- Explain assumptions and rationale/justification: Emphasize the assumptions that bear on the problem. Clearly list all variables used in your model.
- Include your model design and justification for type model used or developed.
- Describe model testing and sensitivity analysis, including error analysis, etc.
- Discuss the strengths and weaknesses of your model or approach.

*Email: david.dreisigmeyer@gmail.com

1 Introduction

This is not really an introduction. I am copying material from the MCM site as above. How do the judges evaluate your paper?

- Conciseness and organization are extremely important.
- Key statements should present major ideas and results.
- Present a clarification or restatement of the problem, as appropriate.
- Present a clear exposition of all variables, assumptions, and hypotheses.
- Present an analysis of the problem, including the motivation or justification for the model that is used.
- Include a design of the model.
- Discuss how the model could be tested, including error analysis and stability (conditioning, sensitivity, etc.).
- Discuss any apparent strengths or weaknesses in your model or approach.

2 Conclusions

References