# **Marketing Technical Contributions**

Imagine that you have decided to adopt LSD Radix sort as the new sorting algorithm for use in a spreadsheet application that you develop and maintain. In this paper, you will write a short argument for a non-technical audience to convince them of the strengths of Radix sort over at least 2 other sorting approaches and the benefits that it will bring to users of your spreadsheet application. While you can assume your audience is familiar with computers and spreadsheets, you can not assume that they have any knowledge of computer programming. In order to sell users on the use of this algorithm, you will want to make claims about the benefits it offers (e.g., 'will make your sorts 100x faster!!!'). You are free to make these claims, but you must be able to back up any claims you make with clear justifications (e.g., mathematical calculations, brief logical proofs, etc.). Hence, your paper will consist of two parts: first, a 1 page portion targetting a non-technical audience, and then a second portion of up to 2 pages that presents justifications of any claims made in the first portion. Note that the second portion should target a technical audience, as it is intended to be read by your classmates in reviewing your work. You can imagine these last two pages as the footnotes or 'fine print' that provide the full details of each claim made. The first portion of your paper should be (at most) 1 page double-spaced using 1 inch margins and 12pt Times New Roman font. This is especially short by design to force you to make very concise arguments. Your justifications can account for (up to) an extra 2 pages using the same formatting, leading to an overall maximum length of 3 pages for the paper. Please keep in mind the following points of what would make for a good paper: The paper presents a clear and convincing argument that favors LSD Radix sort over other approaches. All claims made in support of this argument are backed up by valid and verifiable justifications. The paper makes valid assumptions about the technical knowledge of the audience (i.e., for the first page, that they have no assumed programming or technical knowledge, an average consumer). Note that, again, the justifications of the claims presented in the second portion of your paper should be detailed and technical and nature and are not bound by the same assumptions about audience as the first portion of the paper. The paper is of appropriate length and formatting.

#### 1. Clear and convincing argument

Clear and convincing argument justification Comment 1: (\*Required)

Clear and convincing argument.

The paper presents a clear and convincing argument that favors Radix sort over other approaches

- 7 Strongly agree
- 6 Agree

- 5 Weakly agree
- 4 Neutral
- 3 Weakly disagree
- 2 Disagree
- 1 Strongly disagree

### 2. Justifications

Justifications justification Comment 1: (\*Required)

### Justifications.

All claims made in support of the argument are backed up by valid and verifiable justifications

- 7 Strongly agree
- 6 Agree
- 5 Weakly agree
- 4 Neutral
- 3 Weakly disagree
- 2 Disagree
- 1 Strongly disagree

### 3. Valid audience

Valid audience justifications Comment 1: (\*Required)

## Valid audience.

The paper makes valid assumptions about the technical knowledge of the audience (page 1 requires no technical knowledge, while the justifications are heavily technical).

- 7 Strongly agree
- 6 Agree
- 5 Weakly agree
- 4 Neutral
- 3 Weakly disagree
- 2 Disagree
- 1 Strongly disagree

## 4. Length/formatting

Length/formatting justification

# Comment 1: (\*Required)

Length/formatting.

The paper is of appropriate length/formatting

- 7 Abides by requirements
- 4 Minor issues
- 1 Severe issues

# 5. No graphics/code

No graphics/code justification Comment 1: (\*Required)

No graphics/code.

The paper does not contain any graphics, images, graphs, or code

- 7 No graphics/code
- 1 Contains graphics/code

## 6. Overall

Detailed review

Comment 1: (\*Required)

### Overall.

Overall score

- 7 A
- 6 B+
- 5 B
- 4 C+
- 3 C
- 2 D
- 1 F