MIALab Project HS2020

1st Thomas Buchegger
University of Bern
Bern, Switzerland
thomas.buchegger@students.unibe.ch

2nd Carolina Duran
University of Bern
Bern, Switzerland
carolina.duran@students.unibe.ch

3rd Stefan Weber
University of Bern
Bern, Switzerland
stefan.weber@students.unibe.ch

***Abstract*—Here is the abstract**

I. Introduction

Our hypothesis: "Image normalization has an important influence on the segmentation". Aims of the introduction:

- **To demonstrate importance/impact need**
- **To demonstrate novelty**
- **To justify the hypothesis / aims / investigated technology**
- **To establish expectations/scope of the report**

Some questions which could be answered: Currently, z score normalization is implemented.

- **Are there more powerful normalization methods?**
- **Is normalization really needed?**
- **Is the provided data already normalized in some way?**
- **Can you also unnormalize data to show a negative effect?**

For the research:

- **Understand the problem**
- **What have others already done / is there already a solution?**
- **Can I apply a solution to another problem to my problem?**
- **What lessons can I learn from others work?**
- **What deficiencies exist in others work?**

1) **Demonstrate importance**
   a) **Define the problem**
   b) **Explain the criticality, impact of the problem**
2) **Demonstrate Novelty**
   a) **Explain what is the state of the art / current practice**
   b) **Explain what preliminary / related work has been done towards solving the problem by you and others**
   c) **Explain what deficiencies / problems still exist (specifically the one that you will try to address)**
3) **Present and Justify the Hypothesis / aim / objective**

a) **State Hypothesis /aim/ objective**
b) **Describe evidence supporting hypothesis**

4) **Establish expectations of the report**
   a) **Describe scope of the presented work**
   b) **Present a summary of remainder of the report**

II. Methodology

A. Data

B. Evaluation

III. Results

The results section should match approximately the data analysis section.

IV. Discussion

Aims of the Discussion part:

- **Highlight importance of your work (highlight novelty /impact etc**
- **To interpret your results in relation to your original problem**
- **To put your work into the context of existing work**
- **To present any limitations of the presented work**
- **To make future recommendations**
- **To provide a conclusion of the work**

1) **Importance of the work**
   a) **Summarise your results**
   b) **Reiterate the importance of the work (novelty , impact etc)**
2) **Interpretation of results**
   a) **Interpret your results focussing on the problem described in the introduction. What do the results mean for the described problem?**
   b) **Explain any unusual/important findings (be careful if not your original investigative subject)**
3) **Provide context**
   a) **Describe your results in relation to others and try to explain any discrepancies**
   b) **Emphasize how your results support or refute your hypotheses current thinking in the field. Were results as expected? If not why and what does this mean?**
4) **Limitations of your work**
   a) **Describe any limitations /deficiencies of your work and what impact they have on the findings**
   b) **Suggest possible future solutions**
5) **Conclusions**
   a) **Summarise your findings and relate your findings back to your hypothesis / aim / objective and to your problem.**
   b) **Based on your findings, suggest next steps towards solving your problem**

Acknowledgment

REFERENCES

[1] Test reference 1
[2] Test reference 2