

Binarization of the Minutes of the Early Synod Meetings of the Reformed Churches in South-Africa

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Summary



Research Proposal for Binarization of Historical Handwritten Documents

Outline



- Problem Statement and Substantiation
- Research Aim
- Research Objectives
- Methods of Investigation
- Review

Problem Statement and Substantiation



- Binarization as First Objective in Document Image Processing
- ► Importance of Binarization
- Existing Research on Historical Handwritten Document Binarization
- Document Binarization vs Historical Document Binarization

Problem Statement and Substantiation



- Binarization as First Objective in Document Image Processing
- ► Importance of Binarization
- Existing Research on Historical Handwritten Document Binarization
- Document Binarization vs Historical Document Binarization
- Determine which binarization algorithm is best suited for the binarization of historical handwritten text on degraded paper.

Research Aim



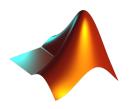
Propose a binarization algorithm best suited for the binarization of historical handwritten documentation.



- ► Literature Study:
 - Thresholding Techniques
 - ► Binarization Algorithms
 - ► Evaluation of Document Image Binarization

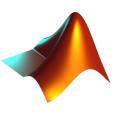


- ► Literature Study:
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 - Evaluation of Document Image Binarization
- ► Familiarization with MathWorks MATLAB



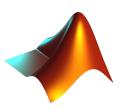


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- Familiarization with MathWorks MATLAB
- ▶ Performance Analysis on Thresholding and Binarization



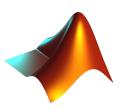


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- ► Familiarization with MathWorks MATLAB
- ▶ Performance Analysis on Thresholding and Binarization
- ► Improve Existing Binarization Algorithm(s)



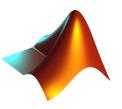


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- Improve Existing Binarization Algorithm(s), OR
 Design New Binarization Algorithm If Opportune





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- Performance Analysis on Thresholding and Binarization
- Improve Existing Binarization Algorithm(s), OR
 Design New Binarization Algorithm If Opportune
- ► Evaluate and Implement Binarization Algorithm of Choice



Methods of Investigation



- Research Methodology:
 - Experimental Computer Science Methodology
- Algorithm Performance Analysis
- Algorithm Design
- Binarization Result Evaluation

Review



- Problem Statement and Substantiation
- ► Research Aim & Objectives
- Methods of Investigation

Questions



