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Systems Neuroscience
& Neurotechnology Unit

Subject of Bachelor Thesis

Bachelor Thesis

Systems Neuroscience & Neurotechnology Unit
Saarland University of Applied Sciences
Faculty of Engineering

Submitted by	:	Max Mustermann
Matriculation Number	:	1234567
Course of Study	:	Biomedical Engineering (Bachelor)
First Supervisor	:	Prof. Dr. Dr. Daniel J. Strauss
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Saarbrücken, June 2, 2015

Abstract

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Zusammenfassung

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Declaration

I hereby declare that I have authored this work independently, that I have not used other than the declared sources and resources, and that I have explicitly marked all material which has been quoted either literally or by content from the used sources. This work has neither been submitted to any audit institution nor been published in its current form.

Saarbrücken, June 2, 2015

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Max Mustermann

Contents

1 Introduction

1.1 Motivation

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. [1]

1.2 Acknowledgments

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[1]see [1]

2 Problem Analysis and Goals

2.1 State of the Art

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Figure 2.1: 10-20-system of EEG leads[1]

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[1]see [2], figure 13.2

2.2 Recent Advances in Research

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special c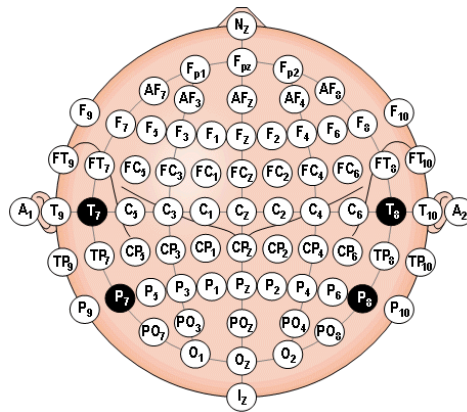ontent, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. [2]

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

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[2]see [1, 3]

3 Materials and Methods

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

4 Results

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5 Discussion

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6 Conclusions and Future Work

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A Tables and Measurement Results

Table A.1: Surgical needle sizes in Gauge[1]

Size [G]	Diameter [mm]	Colour code
10	3.4	brown-olive
11	3.0	yellow-green
12	2.7	lightgray
13	2.4	purple
14	2.1	lightgreen
15	1.8	blue-gray
16	1.6	white
17	1.4	violet
18	1.2	pink
19	1.1	ivory
20	0.9	yellow

[1]see [4]

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List of Abbreviations

ABR The Auditory Brainstem Response is a type of time-locked stimulus-dependent evoked potential, which occurs in the acquired EEG signals within tens of milliseconds post stimulus. 6

EEG The Electroencephalogram is a weak bioelectric signal originating from the electric sum activity of the apical dendrites of pyramidal neurons in the neocortex. 6

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