MODELLING AND DATA SCIENCE - PROFESSIONAL DESIGN PROJECT FINAL REPORT 2024/25

PROJECT TITLE   
Transcription, translation and text-to-speech of the voice from short audio and video files using artificial intelligence methods

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ABSTRACT This template provides instructions for your final report. The abstract must be a concise yet comprehensive reflection of what your project is about. In particular, the abstract must be self-contained, without abbreviations, footnotes, or references. It should be a microcosm of the full report, describing the problem, solution, technical summary of the prototype and how it was tested.

The abstract should be below 1000 characters. Ensure that your abstract reads well and is grammatically correct.

KEYWORDS Enter a list of keywords or phrases in alphabetical order, separated by commas.

I. INTRODUCTION

This document is a template for Microsoft Word versions 6.0 or later. When uploading your solution please upload both a DOCX file and a PDF file.

Headers for different sections can be named differently, but all the required content must be included.

Do not change the font sizes or line spacing. Try to use the Format Painter to keep the formatting of text and headers consistent (copy-paste the formatting from existing elements of the template).

A.  PURPOSE AND OBJECTIVES OF THE PROJECT

Analytical description of the problem situation presented at the beginning of the project work. Scale of the problem. Identify the subject of the project.

B.  PROBLEM FINDING

Define the purpose and expected result of the project Describe the path from the starting point stated above, through detailed research on the general problem to the narrowed specific problem formulation.

II.  IDEA FINDING

This section will describe the process of finding your solution.

A.  STATE OF THE ART

Research on existing knowledge and solutions in relation to the specific problem defined above. This section will contain the most links to scientific articles or websites of commercial solutions. Include the references in square brackets: [1]. For a complete discussion of references and their formats, see the IEEE style manual at [www.ieee.org/authortools](http://www.ieee.org/authortools). Complete with information on the functional inspiration for the product, i.e. what is missing from currently available and used solutions.

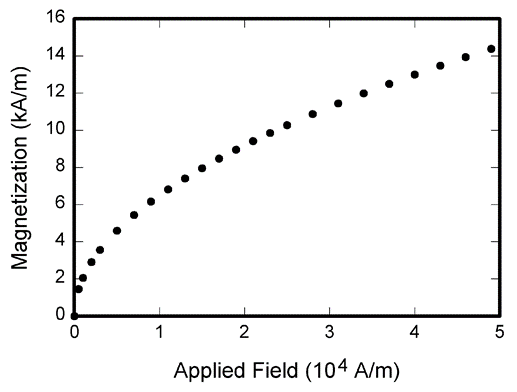
B.  INNOVATIVE IDEAS

Ideas developed by your team, adding new value to better address the stated problem, possibly leading to more effective solutions.

C.  MAIN IDEA SELECTION AND JUSTIFICATION

Which of the above ideas your team finds the most worth developing and why?

Outline the decision-making process involved in selecting an IT tool or programming language and the overall architecture of the software solution being developed or used.

III. SOLUTION IMPLEMENTATION  
Present implementation process and summarize your solution.

1. ***ORGANIZATION AND MANAGEMENT OF PROJECT PROCEEDINGS.***

Provide a breakdown of the project implementation into phases, including the assumed goals and achieved results of the phases.

Present project management methods applied.

***B. TECHNICAL DETAILS***

Details of putting the selected idea into life, e.g. in form of a software produced, results of data analysis etc.. Reference figures using phrases such as “…as seen in Fig. 1 and Table I”.   
Provide a summary of the technical documentation and the documentation for the user.

IV. VERIFICATION

How your team plans to verify (or has already verified) if your solution effectively solves the problem?

Provide Information about the key usage scenarios that the developed method/program implements and information about the tests conducted and their results.

**V. LIFE CYCLE ANALYSIS.**

Present LCA inventory analysis relevant to the project subject. Present impact assessment methods used and interpretation of the obtained results with recommendations and limitations.

**VI. LEGAL ASPECTS AND PROTECTION OF INTELLECTUAL PROPERTIES**

Present practical legal aspects of the project realisation and analysis of the intellectual property protection issues relevant to the project. Present analysis of the legal elements of the solution based on legal acts and peer-reviewed journals (or professional literature) including a comparison of the situation in Poland and other countries.

VII. CONCLUSIONS AND PERSPECTIVES

Summarize your work, highlighting strengths and weaknesses of its results. How do you see a potential follow-up of the project?

APPENDIX

Appendixes, if needed, appear before the acknowledgment. This is a good place to place a link to code or data repositories online.

ACKNOWLEDGMENTS

A place to thank the supervisor, experts, organization and/or sponsors that helped with your project.

**REFERENCES**

1. A. Author, “Paper title,” *Journal Name*., vol. 13, no. 1, pp. 11-23, Jan. 1995. DOI: 10.1109/TTHZ.2016.2544142
2. B. Author, “Paper title,” *Journal Name*., vol. 13, no. 1, pp. 11-23, Jan. 1995. DOI: 10.1109/TTHZ.2016.2544142

FIGURE 1.  Prepare good resolution of images (at least 300dpi, preferably 600dpi) and max 88mm wide. If the figure comes from external reference, cite it here [2]

TABLE I

Common Units for Magnetic Properties1

|  |  |  |
| --- | --- | --- |
| Symbol | Quantity | Conversion from Gaussian and  CGS EMU to SI a |
| F | magnetic flux | 1 Mx ® 10-8 Wb = 10-8 V·s |

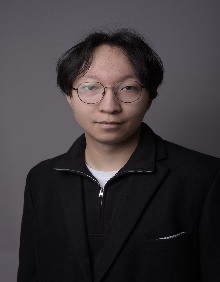
1Typically scientific articles do not use vertical lines in tables. Short footnotes under the table can provide some additional information, or a source for the data []

AUTHOR BIOS AND CONTRIBUTIONS

Obraz zawierający Ludzka twarz, osoba, ubrania, okulary/szklanki

Opis wygenerowany automatycznieMARTA K. HAIK was born in Lodz in 1999 and since 2020 has been enrolled at University XXX, majoring in XXX. If he/she has some job experience you can put it in here as well.

The second paragraph should summarize the author’s contributions to the project. Was he/she primarily involved in research? Prototype design? Coding? Managed/organized meetings? Prepared what sections of the report? You can write out longer description of what the author did, spreading to below the photo. The description should be between 500 and 1000 characters long. The photos should be 3,26 cm x 2,56 cm and either all colored or all greyscale.

ANSAR SHILIBEKOV was born in Lodz in 1999 and since 2020 has been enrolled at University XXX, majoring in XXX. If he/she has some job experience you can put it in here as well.

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**Obraz zawierający Ludzka twarz, osoba, uśmiech, Warga

Opis wygenerowany automatycznieFILIP CHMIEL** was born in Lodz in 1999 and since 2020 has been enrolled at University XXX, majoring in XXX. If he/she has some job experience you can put it in here as well.

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Obraz zawierający Ludzka twarz, osoba, uśmiech, Warga

Opis wygenerowany automatycznieRADOSŁAW LECH was born in Lodz in 1999 and since 2020 has been enrolled at University XXX, majoring in XXX. If he/she has some job experience you can put it in here as well.

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Obraz zawierający Ludzka twarz, osoba, uśmiech, Warga

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Obraz zawierający Ludzka twarz, osoba, uśmiech, Warga

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Obraz zawierający Ludzka twarz, osoba, uśmiech, Warga

Opis wygenerowany automatycznieZUZANNA GIELEC was born in Lodz in 1999 and since 2020 has been enrolled at University XXX, majoring in XXX. If he/she has some job experience you can put it in here as well.

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Obraz zawierający Ludzka twarz, osoba, uśmiech, Warga

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Obraz zawierający Ludzka twarz, osoba, uśmiech, Warga

Opis wygenerowany automatycznieJULIUSZ CIĄŻYŃSKI was born in Lodz in 1999 and since 2020 has been enrolled at University XXX, majoring in XXX. If he/she has some job experience you can put it in here as well.

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Obraz zawierający Ludzka twarz, osoba, uśmiech, Warga

Opis wygenerowany automatycznieHUBERT WODZIAK was born in Lodz in 1999 and since 2020 has been enrolled at University XXX, majoring in XXX. If he/she has some job experience you can put it in here as well.

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