International Collaboration on Handwriting Analysis

Meeting Minutes - Week 2 Tutorial (non-audit)

Location: CSIT N101/Virtual Zoom Meeting

Date and Time: 3rd of March 2023

Attendance:

Tutors: Anthony Troy, David Retter, David Flores

Our Team: Mohammad Saddam Mashuri, Rui Lu, Sage Labios, Xiangda Li, Yang Ding, Neo

Han (Yuyang Han), Zhishang Bian

Shadow Team: Xiaodan Du, Yanzhi Wang, Binxu Wang, Dongyuan Yang, Siru Wang, Jialiang

Chen, Monis Anees

Absences: -

Agenda

1. Team Leader Introduction

- 2. Team Leader Elevator Pitch Project Overview
- 3. Team Members Intro
- 4. How we are going in preparation for Audit 1 as a team
- 5. Introducing CERUG Chinese Character dataset for training a CNN model, and K-means Clustering technique
- 6. Potential Computer Vision Method for image preprocessing

Key Discussions and Decisions

- 1. Every team consented for having their Elevator Pitch and Audit order assigned (first to last, our team starts from 4.30 for audit): Wisdom, International, MultiMedia, CareerVitae
- 2. From the previous meeting with the client, the team proposed three approaches to classification: the HAT system, K-means clustering, or semi-supervised learning. The team haven't decided which method to use yet, but HAT system is low on priority due to complications with its requirements and its unsuitability with the project requirements. So, the team preferred to use either K-means clustering and semi-supervised. To figure out which method to use, the team is subdivided into two, one to develop with k-means clustering, and the other with semi-supervised, and finally benchmark them in the coming weeks to find out which is best. David Retter proposed for the team to not dismiss the HAT system and consider using HAT as an option.
- 3. From the previous meeting with the client, as a starting point, the team proposed to use image processing techniques to pre-process the leaflets (cropping, etc.) before classifying them. David Retter suggested that if image cropping is only for 300 leaflets, then the team should forego pre-processing implementation and assign people to manually pre-process them. However, Anthony Troy suggested the team to ask the client Sophie for clarification on whether she prioritizes finishing the research, or for use on later researchers with bigger data sets.
- 4. David Retter ask the team to figure out how to communicate the progress for our project better, since based on his experience supervising ML projects, the supervisee has difficulty explaining the progress and it is always the same "we are enhancing the model."
- 5. Overall, David Retter advised us to ask the client to discuss more about the risks, the client's motivation and future of the project, understand the priority for the project, ask experts in handwriting analysis with machine learning / computer vision experience for advice if possible.

Action items	Owner(s)	Deadline	Status
Prepare - Repository(s). *Set permissions for people to view them. - Landing page(s) - Communication channel(s) - Other stuff	Our team	6AM Monday, 6 March 2023	In Progress
Prepare for the audit (questions for the shadow team, what to present, etc.)	Our team	4PM Friday, 10 March 2023	In Progress