Memorandum of Understanding (MoU) between "Neuflex Talent Solutions Pvt Ltd"(the Company) and "Cummins College of Engineering for Women, Pune" (CCOEW)

17 February, 2022

Project name: SAMYAK: Multi-modal Consumer Mapping

Nature: Consultancy Project

Timeframe: 8 months starting 1 March 2022. (Fortnightly assessment meetings)

Consultancy offered to/ PI: Dr Mrudul Dixit (E&TC Dept)., CCOEW.

Basic Premises:

1. All IP of the project stays with Neuflex Talent Solutions.
2. Potential Product development stays only with Neuflex Talent Solutions.
3. CCOEW faculty will publish joint research papers with the company (Journal/Conference)
4. Certificates given after successful completion, to the faculty by Neuflex Talent Solutions.

Abstract of the Consultancy Project:

AI/ML /DL driven holistic mapping of multimodal parameters of the consumer to a multitude of consumer preferences for improved outcomes.

Expertise required: Data Analysis, AI/ML/DL Tools, Image Analysis, Python, AI/ML expertise (WEKA, CV)

Overall Consultancy Amount: Rs 2,00,000 (Rs Two Lakh only)

Consultancy Payment Schedule: will be paid upfront, before 31 March 2022.

Deliverables:

1. Basic Literature Survey results for various components of the project
2. Data Analysis results, Python based models built for and from the data (possibly Python)
3. Scripts/ APIs written for integration with other modules
4. Documentation of the project (soft copy and paper copy)
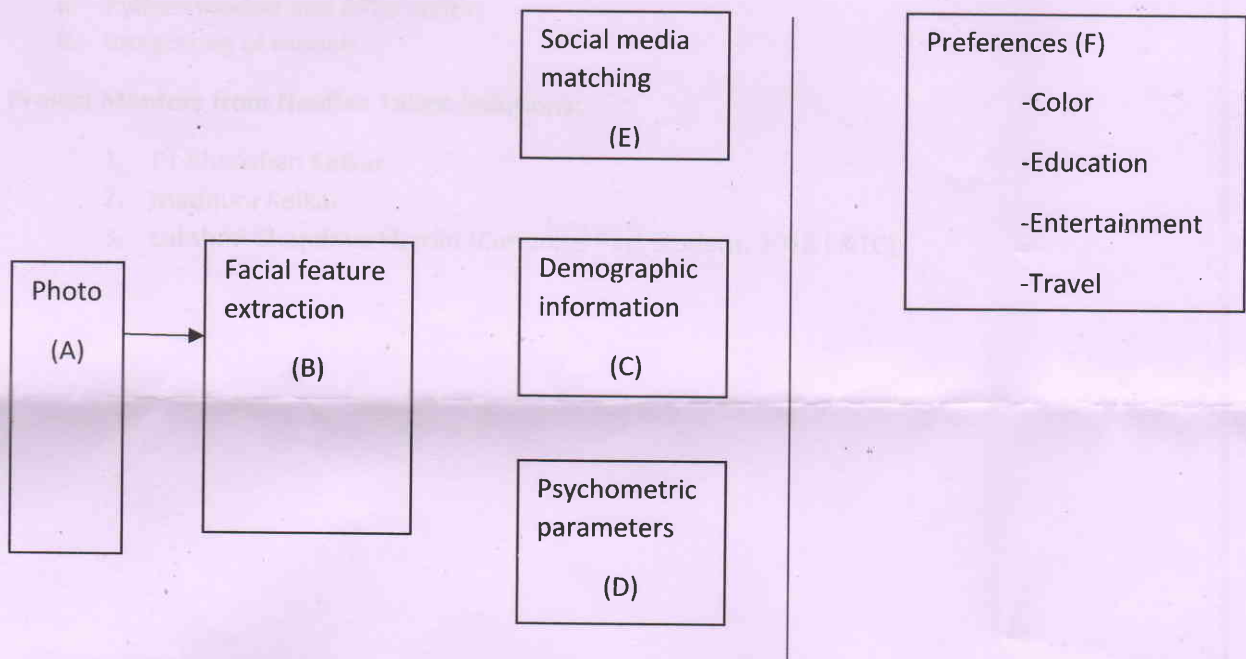
Dr. Bhooshan Kelkar

Director, Neuflex Talent solutions

Dr Madhuri Khambete

Principal, CCOEW.

For Neuflex Talent Solutions Pvt. Ltd.

Schematic of Project Samyak:

	Social media matching (E)	Preferences (F) -Color -Education -Entertainment -Travel
Photo (A) → Facial feature extraction (B)	Demographic information (C)	
	Psychometric parameters (D)	

Possible AI/ML/DL Project components:

1. Finding and comparing FREE tools for achieving- Mapping of Static Photo (A) to "Facial Feature extraction" (B).
2. Mapping Facial Features (B) to →Preferences (F)
3. Mapping Facial Features (B) + Demographic Data (C) to →Preferences (F)
4. Mapping Facial Features (B) + Demographic Data (C) + Psychometry Data (D) →to Preferences (F)
5. Mapping Facial Features (B) -→ Psychometry Data(D)
6. Mapping Demographic Data (C) + Psychometry Data (D) →to Preferences (F)
7. Mapping Facial Features (B) to →Demographic Data (C), using Social Media platforms (E) such as - Meta, LinkedIn etc.

Priority vis a vis project components:

Phase 1:   1,2,3,5,6

Phase 2:   4,7

These project component will involve various aspects such as

1. Literature Surveys
2. Data collection: Photos and structured data
3. Data Management and Data Preparation

4. Data cleaning/ sensitivity analysis/ Factor analysis
5. Image Analyses
6. AI/ML/DL applications for the cleansed data
7. Training/Testing of models and improving efficiency
8. Python models and APIs/ scripts
9. Integrating of models.

Project Mentors from Neuflex Talent Solutions:

1. Dr Bhooshan Kelkar
2. Madhura Kelkar
3. Lakshmi Chandrasekharan (Cummins Past student, 2018 E&TC)