i-SPiKE 2023

INTERNATIONAL EXHIBITION & SYMPOSIUM ON PRODUCTIVITY, INNOVATION, KNOWLEDGE & EDUCATION

"Optimizing Innovation in Knowledge, Education and Design"

EXTENDED ABSTRACT

e ISBN 978-967-2948-56-8

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Editors : Dr. Siti Norfazlina Yusoff
Azni Syafena Andin Salamat
Nurfaznim Shuib

Cover design : Syahrini Shawalludin
Layout : Syahrini Shawalludin

eISBN 978-967-2948-56-8

Published by:
Universiti Teknologi MARA (UiTM) Cawangan Kedah,
Sungai Petani Campus,
08400 Merbok,
Kedah,
Malaysia.

Assalamualaikum warahmatullahi wabarakatuh,

First and foremost, I would like to express my gratitude to the organizing committee of i-Spike 2023 for their tremendous efforts in bringing this online competition a reality . I must extend my congratulations to the committee for successfully delivering on their promise to make i-Spike 2023 a meaningful event for academics worldwide.

The theme for this event, 'Optimizing Innovation in Knowledge, Education, and Design,' is both timely and highly relevant in today's world, especially at the tertiary level. Innovation plays a central role in our daily lives, offering new solutions for products, processes, and services By adopting a strategic approach to 'Optimizing Innovation in Knowledge, Education, and Design,' we have the potential to enhance support for learners and educators, while also expanding opportunities for learner engagement, interactivity, and access to education.

I am awed by the magnitude and multitude of participants in this competition. I am also confident that all the innovations presented have provided valuable insights into the significance of innovative and advanced teaching materials in promoting sustainable development for the betterment of teaching and learning. Hopefully, this will mark the beginning of a long series of i-Spike events in the future.

It is also my hope that you find i-Spike 2023 to be an excellent platform for learning, sharing, and collaboration. Once again, I want to thank all the committee members of i-Spike 2023 for their hard work in making this event a reality I would also like to extend my congratulations to all the winners, and I hope that each of you will successfully achieve your intended goals through your participation in this competition.

Professor Dr. Roshima Haji Said
RECTOR
UiTM KEDAH BRANCH

WELCOME MESSAGE (i-SPiKE 2023 CHAIR)

We are looking forward to welcoming you to the 3rd International Exhibition & Symposium on Productivity, Innovation, Knowledge, and Education 2023 (i-SPiKE 2023). Your presence here is a clear, crystal-clear testimony to the importance you place on the research and innovation arena. The theme of this year's Innovation is "*Optimizing Innovation in Knowledge, Education, & Design*". We believe that the presentations by the distinguished innovators will contribute immensely to a deeper understanding of the current issues in relation to the theme.

i-SPiKE 2023 offers a platform for nurturing the next generation of innovators and fostering cutting-edge innovations at the crossroads of collaboration, creativity, and enthusiasm. We enthusiastically welcome junior and young inventors from schools and universities, as well as local and foreign academicians and industry professionals, to showcase their innovative products and engage in knowledge sharing. All submissions have been rigorously evaluated by expert juries comprising professionals from both industry and academia.

On behalf of the conference organisers, I would like to extend our sincere thanks for your participation, and we hope you enjoy the event. A special note of appreciation goes out to all the committee members of i-SPiKE 2023; your dedication and hard work are greatly appreciated.

Dr. Junaida Ismail
Chair
3rdInternational Exhibition & Symposium Productivity, Innovation, Knowledge, and Education 2023 (i-SPiKE 2023)

SWANKY STYLER APP: STYLING YOU!

Nurkhairany Amyra Mokhtar
College of Computing, Informatics and Mathematics, Universiti Teknologi MARA Cawangan Johor Kampus Segamat, 85000 Segamat, Johor, Malaysia.
nurkhairany@uitm.edu.my

Nur Fatihah Shaari
Faculty of Business and Management, Universiti Teknologi MARA Cawangan Johor Kampus Segamat, 85000 Segamat Johor, Malaysia.
fatihahshaari@uitm.edu.my

Fatin Farazh Ya'acob
Faculty of Business and Management, Universiti Teknologi MARA Cawangan Johor Kampus Segamat, 85000 Segamat Johor, Malaysia.
fatinfarazh@uitm.edu.my

Basri Badyalina
College of Computing, Informatics and Mathematics, Universiti Teknologi MARA Cawangan Johor Kampus Segamat, 85000 Segamat, Johor, Malaysia.
basribdy@uitm.edu.my

Muhammad Majid
Faculty of Business and Management, Universiti Teknologi MARA Cawangan Johor Kampus Segamat, 85000 Segamat Johor, Malaysia.
muhdmajid@uitm.edu.my

Mohamad Faizal Ramli
Faculty of Business and Management, Universiti Teknologi MARA Cawangan Johor Kampus Segamat, 85000 Segamat Johor, Malaysia.
faizalramli@uitm.edu.my

ABSTRACT
The COVID-19 pandemic is now causing disruption in the fashion sector and pressuring businesses in the sector to accelerate their digital transformation. A digitalization-driven innovation is required due to the growing demand for more sustainable fashion industry operations and the prospect that things may never be the same again. The rise of digital fashion communication during the COVID-19 epidemic has highlighted this issue. However, haptic technology advancements imply that new forms of tactile engagement may be made accessible online via a mobile application. Therefore, thanks to advancements in virtual, augmented, and mixed reality—technologies based on artificial intelligence (AI), we are bringing digital humans to play a more active part in the fashion industry. Digital people powered by AI can better understand your fashion preferences and create clothes that fit you. Introducing the Swanky Styler App, which streamlines the decision-making process, saves time, and guarantees that styles are chosen to complement each person's skin tone, height, and frame type. The Swanky Styler App has a virtual stylist, shopping bag, and dressing room. Using your smartphone, define your personal style, build your wardrobe, mix and match goods, put on pre-made ensembles, and make purchases. As

a result, Swanky Styler App is a handy software for anybody who enjoys shopping and fashion. By fostering innovation and maintaining e-fashion marketing, the growth of digital fashion will also help achieve Sustainable Development Goal (SDG)-9, which aims to advance scientific research and improve the technological prowess of industrial sectors.

Keywords: fashion industry, artificial intelligence, clothes, style

INTRODUCTION

As the global fashion business expands, more and more designs are being supplied in the marketplaces. People must make informed decisions since appearance is a reflection of one's image, personality, and self-confidence. However, selecting the appropriate clothing is a significant matter, and people frequently take a lot of time over it. People are focused on their daily life these days. They want the best and quickest answers for everything they do. The same is true for the method of gathering design inspiration. Therefore, having the option to explore all of your items and get fashion inspiration within your wardrobe "online application" is the simplest approach to be both fashionable and sustainable. Fashion shoppers face difficulties when they are not permitted to touch and physically sample the goods during the COVID-19 epidemic because the sense of touch is essential to fashion and luxury since dress and accessories are experienced with and on the body.

The Swanky Styler App uses mobile application technology and artificial intelligence-based (AI-based) technology to streamline the selection process, save time, and guarantee that the designs chosen are suitable for each individual's skin tone, height, and body type. You may upload your closet and try out different dress ideas with this app. You can always use the app, which is wonderful for refreshing your outfit without having to make any new purchases. Additionally, consumers can have first-rate access to a variety of styles without ever leaving their sofas. Imagine walking into your dream closet, which is filled with thousands of items.

OBJECTIVES

i) To offer the greatest means of selecting and purchasing clothing online.
ii) To prevent viruses, avoid physical touch when trying on clothing when shopping.

DESCRIPTION OF THE PRODUCT

This programme has a personal virtual stylist, a virtual dressing room, and a virtual shopping bag. With the help of your smartphone, you may define your personal style, build your wardrobe, mix and match products, put on ready-to-wear ensembles, and make purchases. Find apparel for any occasion in a thorough clothing catalogue from mass-market, regional, and upscale brands. You may get fully immersed in the world of fashion and the newest trends with the assistance of personalised mannequins and Artificial Intelligence (AI)-based style tips. Digital people powered by AI can create clothes that is made exactly to your measurements and better understands your taste.

Step 1: Install Swanky Styler App from the AppStore or Google Play Store. Enter your information, submit a photo of yourself, or use an AI-based system to scan your entire body. As seen in Figure 1, an AI-based system will assist in detecting your specifics.

Step 2: Select an interest such as shopping or dressing in a way that suits your everyday needs.

Step 3: To shop, scan the store's barcode. This will display the most recent and readily accessible clothing.

Step 4: Select clothing depending on your choices from the Swanky Styler App. It will help if it exactly fits you. If you're interested, add the item to your basket, check out, pay online, and then pick it up from the counter. time savings, contactless payment, and cashless.

Step 5: Adjust your look for everyday use: Simply log into the Swanky Styler App if you're unsure of what clothes will suit you, and our AI-based system will propose the ideal option for selecting clothing from your closet based on your mood and feeling.

Figure 1. Swanky Styler App AI-based system

NOVELTY

For those who enjoy shopping and fashion, there is the Swanky Styler App.

iii) A digital changing room with virtual fittings to boost client satisfaction
iv) Special recommendations: Get tailored wardrobe and fashion advice based on your traits (body type, skin tone, emotion, and personal preferences).
v) Shop wisely by choosing items that flatter your figure and emphasise your own style.
vi) When shopping at a mall, pick the right size and colour to avoid spending time on returns.

CONCLUSION

Everyone needs guidance while shopping for and selecting clothing, thus the Swanky Styler App will be among the most well-liked mobile applications. This app's main goal is to link users with the fashion world. The use of an artificial intelligence (AI) database system is one of the Swanky Styler App's biggest benefits. Based on predetermined criteria, the Swanky Styler App will assist the user in selecting an appropriate outfit. The information will first be reviewed by fashion industry professionals before being included to the Swanky Styler App database. This step is essential to periodically keeping the Swanky Styler App relevant.

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