FUNDING PROGRAMME: Erasmus+

SUBPROGRAM: Higher Education



PROJECT TITLE /ACRONYM:

Collaborative Online International Learning in Digital Fashion – DigitalFashion

CONTRACT NO.: 2021-1-RO01-KA220-HED-000031150

TOTAL PROJECT BUDGET: 308.325 Euro INCDTP'S BUDGET: 49.900 Euro

PROJECT STARTING DATA: 01.02.2022 PROJECT ENDING DATA: 31.01.2025

PAGINA WEB: https://digitalfashionproject.eu/

PARTNERS:

CO: INCDTP - Bucharest

P1: ENSAIT - France

P2: HoGent / FTILab+ - Belgium

P3: University Maribor / Faculty of Mechanical Engineering – Slovenia

P4: CITEVE - Portugal

P5: Technical University "Gh. Asachi" – Iasi / Faculty of Industrial Design and Business Management









GENERAL OBJECTIVE:

Bridge the existing gap in digital skills for garment design by introducing new teaching and learning methodology with support of a virtual environment (https://digitalfashion.ensait.fr/login).

EXECUTION PHASES:

PR1. New methodology for a common framework on Collaborative Online International Learning in the field on Digital Fashion.

- PR2. Library of knowledge (the three databases) for virtual fashion design and technology.
- PR3. Training platform of fashion design by personalized 3D virtual garment fitting.
- PR4. Curricula for Collaborative Online International Learning in the field on Digital Fashion.

SCIENTIFIC CONCEPT:

Students and young professionals in textile&clothing lack of a training platform for digital design of garments. Current software is proprietary and available as desktop applications. The project DigitalFashion proposed an open access training platform as web application for digital design of garments

(https://digitalfashion.ensait.fr/login). Relying on the four databases needed by the training platform, namely:

- the fabric database
- the garment database
- the fashion database
- the 3D avatar database

the project partners have developed educational modules, that were implemented as e-learning resources on the Moodle platform of the project in 6 languages (https://www.advan2tex.eu/portal/).

EXPECTED EXPLOITABLE RESULTS:

Improved knowledge and skills in the European textile and clothing industry.

OBTAINED RESULTS:

- PR1 Report on the needs of introducing virtual prototyping of clothing via a survey with 35 textile-clothing companies on partnership level.
- PR2 Four databases with physical and virtual samples of 49 fabrics, 48 patterns, 4 styles and male and female avatars of 3 sizes meant to be used by the simulation platform.
- PR3 The simulation platform for training of students in virtual prototyping of clothing and the User manual. https://digitalfashion.ensait.fr/login
- PR4 Curricula of about 130 pages regarding virtual prototyping of clothing in relation to the four databases of PR2. Implementing the curricula as Moodle e-learning course in six national languages (EN, FR, DU, PT, RO and SI) and a User manual: https://www.advan2tex.eu/portal/
- LTT Joint Staff Event of three days at host University of Maribor and a Guide for best practices and 20 new project ideas.
- ME 12 Multiplier events workshops organized with 426 young professionals from the textile industry.
- PMI Dissemination: 43 publications in scientific journals and at conferences, 87 presentation and leaflet distribution at workshops and seminars, 3 newsletters and 123 social media followers.

The website of the project with all outcomes in PDF (open-access): https://digitalfashionproject.eu/index.php.

DISSEMINATION, PATENT APPLICATIONS, AWARDS:

- WoS published papers: 1
- 1. **Ion Razvan Radulescu, Catalin Grosu, Sabina Olaru, Razvan Scarlat,** Irina Ionescu, **Emilia Visileanu,** Andreja Rudolf, Promoting educational materials in digital fashion, In: Industria Textila, 2023, 74, 5, 572–578, http://doi.org/10.35530/IT.074.05.2022133
- Scopus published papers: 3
- **1. Ion Razvan Radulescu, Sabina Olaru, Mihaela Jomir,** Sheilla Odhiambo, Xianyi Zeng, E-Learning Platform for Digital Customization of Garments, IEEE Xplore, Conferences, 2023 46th International Spring Seminar on Electronics Technology (ISSE), Timisoara, Romania, 2023, pp. 1-4, doi: 10.1109/ISSE57496.2023.10168460
- **2. Ion Razvan Radulescu, Emilia Visileanu, Mihaela Jomir,** Sheilla Odhiambo, Thu Ha Do, Xuyuan Tao, Xianyi Zeng, Database for e-learning platform of digital clothing, IEEE 29th International Symposium for Design and Technology in Electronic Packaging" (SIITME 2023), Craiova, Romania, 18-21.10.2023, IEEE Xplore, ISBN 978–80–7043–987–6. ISSN 1803–7232
- **3. Ion Razvan Radulescu, Catalin Grosu, Mihaela Jomir,** Xianyi Zeng, Cosmin Copot, Andreja Rudolf, Irina Ionescu, Alexandra Cardoso, E-learning of virtual prototyping key factor in the textile & clothing domain, Proceedings 19th eLse International Conference on eLearning and Software for Education, Bucharest, 27.04 2023
- Book chapters: 1
- **1. Ion Razvan Radulescu, Razvan Scarlat, Mihaela Jomir, Catalin Grosu, Emilia Visileanu,** Benny Malengier, Xianyi Zeng, E-textiles to promote interdisciplinary education, IntechOpen Book chapter in book: Electromagnetic Compatibility for Electrical and Electronic Systems.
- BDI published papers: 5
- 1. Sheilla Odhiambo, Alexandra De Raeve, Cosmin Copot, Ion Razvan Radulescu, Andreja Rudolf, Tadeja Penko, Xianyi Zeng, Xuyuan Tao, Thu-Ha Do, Alexandra Cardoso, Irina Ionescu, Joris Cools, Creation of databases for a virtual training library in fashion design, CDATP, ISSN 2701-939X, 2024, Vol. 5, No. 2, pp. 140-150, DOI 10.25367/cdatp.2024.5.p140-150
- **2. Ion Razvan Radulescu, Georgeta Popescu, Cristina Grosu, Sabina Olaru,** Xianyi Zeng, Cosmin Copot, Fabric database for e-learning platform in the field of virtual clothing prototyping, Proceedings ICAMS 2024.
- 3. Ion Razvan Radulescu, Emilia Visileanu, Catalin Grosu, Razvan Scarlat, Georgeta Popescu, Rezilienta in

educatia online in context de criza, Buletinul AGIR 1/2024. https://www.buletinulagir.agir.ro/articol.php?id=3325

- **4.** Andreja Rudolf, Tadeja Penko, Zoran Stjepanović, **Ion Razvan Radulescu**, Alexandra De Raeve, Xianyi Zeng, Manuela Avadanei, Alexandra Cardoso, Research on digital skills needed for the fashion and clothing companies in european countries, Textile Science and Economy, 13th International Scientific-professional conference 21-22 October, 2022, Zrenjanin, Serbia.
- **5.** Irina Ionescu, Emil Constantin Loghin, Manuela Lăcrămioara Avădanei, Andreea Talpa, **Ion Răzvan Rădulescu,** Digital Fashion A MUST IN OUR DAYS, TTPF 2023 international conference- Iasi, RO.
- Scientific communications: 2
- 1. Ion Razvan Radulescu, Visileanu Emilia, Laurentiu Dinca, Elena Perdum, Cezar Lupescu, Popescu Georgeta, Grosu Cristina, Textilele electronice prietenoase cu mediul si formarea profesionala a tinerilor specialisti, AGIR symposium: Educatia Componenta esentiala a politicii de mediu, Jun. 2024.
- 2. Ion Razvan Radulescu, Visileanu Emilia, Laurentiu Dinca, Elena Perdum, Cezar Lupescu, Popescu Georgeta, Grosu Cristina, Aplicatii ale prototiparii virtuale pentru e-textile, Workshop THORR Nucleus project, Nov. 2024
- Awards: 2
- **1.** Diploma of Honor Gold medal Inventica 2022, Iasi, Romania, for DigitalFashion Project, offered to: **Ion Razvan Radulescu,** Irina Ionescu, Manuela Avadanei, Carmen Loghin, Andreea Talpa, Carmen Tita.
- 2. Certificate of excellence Inventcor 2024, Deva, Romania, awarded to Ion Razvan Radulescu, project DigitalFashion.

CONTACT PERSON:

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