Ministero dell'Università e della Ricerca | **Italiadomani** PIANO NAZIONALE DI RIPRESA E RESILIENZA | **PNC** Piano nazionale per gli investimenti complementari al PNRR Ministero dell'Università e della Ricerca | **Università degli Studi di Palermo**

ALLEGATO 1
Scheda progetto

Posti	N. 1
Progetto	DARE – DIGITAL LIFELONG PRECENTION
CUP	B53C22006460001
S.C.	01/B1 - INFORMATICA
S.S.D.	INF/01 - INFORMATICA
Sede di svolgimento dell'attività di ricerca:	Dipartimento di Matematica e Informatica
Struttura di svolgimento dell'attività didattica:	Dipartimento di Matematica e Informatica
Impegno scientifico	Attività di ricerca coerenti con il settore scientifico disciplinare INF/01 per lo svolgimento delle seguenti attività previste nel **Progetto DARE**: **Spoke 1 - ENABLING FACTORS AND TECHNOLOGIES FOR DIGITAL PREVENTION**: Lowering and breaking down barriers for adopting innovative, sustainable, high quality, and effective digitally enabled solutions for prevention. The overall objective is to co-create with stakeholders a personalized prevention roadmap for future healthcare that incorporates digital solutions along the entire prevention path. **WP4** - Technology and Analytics: the aim is to identify, develop, adapt, and personalize the enabling technologies. **Task 4.1 - HPC, HPDA, Cloud, and Edge computing**. This task identifies, adapts, and develops computing solutions that are functional to the requirements and needs of the pilots in spoke 2 and spoke 3. This task will work on both on-premise and cloud-based solutions exploiting the three models of SaaS, PaaS, and IaaS. This task will develop software interfaces and integration strategies, in agreement with the specifications defined in Task 3.1, to ensure the solution's successful deployment in spoke 2 and spoke 3. **Task 4.2 – Model integration and deployment**. The success of a machine learning (ML) model, and data-driven methods in general, does not consist exclusively of its accuracy but depends on its integration with non- ML software as part of a sizeable ML-based system. This task aims at defining effective approaches for transitioning ML models, developed by data scientists in Task 4.3, into ML-based software systems, focusing on MLOps and online testing to assure the quality of both data and models after being deployed online. **Task 4.3 - Data Mining, AI, ML, Deep Learning, big data analytics**. This task will identify/adapt/develop data-driven tools and methods used in the pilots in spoke 2 and spoke 3, including descriptive and predictive analytics. To overcome the issue of the black-box nature of ML models, both generic and modelling-specific explainable methods will be used whenever relevant. AIbased (semantic) indexing of entities and relations in the data will be developed for the extraction of patterns and correlations, including aid in the searching, browsing, retrieval, and explanation of information to demonstrate tangible value and improved usability of health data for end-users.
Impegno didattico	Disciplinare e Attività formative da svolgere nell'ambito del progetto DARE
Numero di pubblicazioni:	Numero Massimo di 12
Lingua straniera:	Inglese