



Research Area: MAKE: Exploring Innovative Approaches to the Ideation of Artefacts and Spaces | Project Timespan: 2019-2021

FABRIC(A): crafting new fabrics acrossing traditional craft, digital fabrication and e-textiles

This project aims at exploring possibilities of merging analogue textile crafting techniques with digital technologies to generate new forms of fabrics and new making processes, tools and methods.

Team:

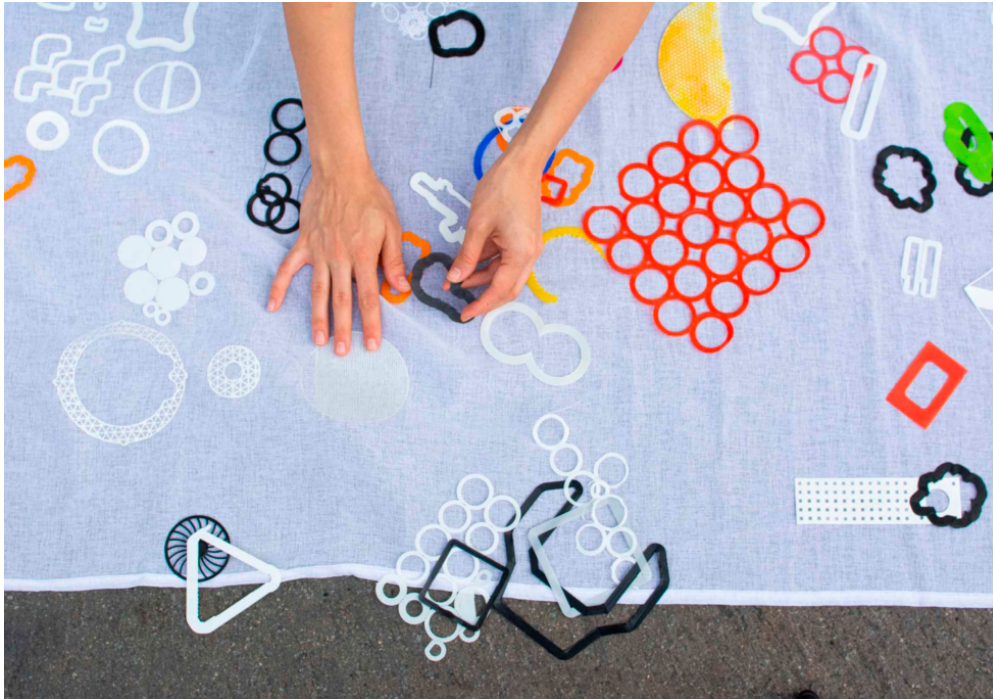
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More information: <https://fabrica.projects.unibz.it/>

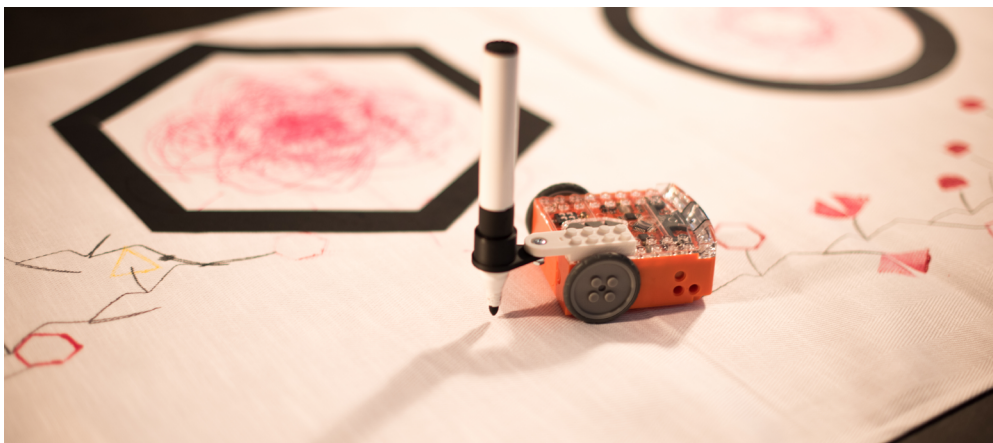
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It is a practice-based design research that continuously generates hands-on experiments and thus, it gathers the results in Fabric(a) platform which allows others to make their own fabrics while emphasizing the democratization of access to tools and technologies. This project has three main exploration areas: man-machine construction, unconventional materials, and interactivity (soft sensors and actuators) in which tacit knowledge transforms into recipes of new textile making processes.



3D printing scraps and textile pattern making

This project gave rise to many public interventions, workshops, new tools, recipes for textile making techniques augmented and supported with digital technologies. During the project, the workshops were the moments in which the tools and methods were used by different public, ranging from textile crafters to makers. The project results had many public presentations, ranging from exhibitions to online conferences and talks. In these public events, the project disseminated its results as engaging participatory events inviting people to craft textiles by using hybrid tools, merging analogue crafting techniques with technological tools such as robots and generative design software.



Co-crafting with robots – LUNA exhibition at unibz, 2019.

The fabric(a) project became an experimental gathering of activities, workshops that continuously generated new knowledge about crafting textiles with the aid of digital technologies. Through the DIY manuals it transformed the tacit knowledge of crafting and coding which happened during the project into recipes of new textile making processes. Besides generating new knowledge and sharing it with a wider public, it also opened dialogue and discussion about alternative ways of making textiles using digital technologies, that can be more sustainable and collaborative. Moreover, during the workshops, the project engaged with wider public - with non-



Co-e-knitting tool – generative design with analogue knitting
FablabNet event, Trento, 2019.



Abiti Parlanti tool kit – giving voice to second hand clothes
Fashion Revolution Events, Turin (2019) and Bergamo (2020).

designers by bringing the scientific results outside of university.

The various workshops also offered possibilities to design students of unibz to explore and learn textile craft techniques and methods, and further imply them into their projects. It also enriched the activities done within BITZ Fablab, opening a new field related to textile crafting and soft electronics. As a final event, an online seminar – Fabric(a) Dialogues- was conducted sharing the results with a wider public and opening a discussion with other experts from the field. Moreover, it gave rise to a new side project (Ceyizlab) that follows a speculative design method for re-thinking of a traditional ritual for crafting textiles in Turkey.



Ceyizlab project: Ceyiz hacking kit.