

SENSOR VARIABLE FONT WORKSHOP

Introduction

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Sensor Variable Font: *Semantic interfaces through variable fonts*

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“Today’s city is the postmodern city: untamed, shrew, capricious, ever-changing; actually, it is not a city but a text; a text written by millions of unknown writers, unaware that they are writers, read by millions of readers; each reading his or her own personal and subjective story in this ever changing and chaotic text, thus changing and recreating it and further complicating it”.

Juval Portugali (2000)

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Contextualization

- According to the World Urbanization Prospects report (United Nations, 2018) **currently 55% of the world's population lives in cities and is expected to reach 68% by 2050**, which means 2.5 billion more people.
- In this context, Portugali (2000) highlights how **the city has become a text to be read** in which citizens are increasingly protagonists of their own story.
- We move quickly towards the so-called smart cities, where IoT and the hyper-connectivity of citizens shape **new paradigms of coexistence and interaction**.
- According to Cisco (2016), **500 billion devices with sensors collecting data** are expected by 2030.



“The future for UI typography being all about sensors and font formats that can respond to data acquired from these sensors, and eventually also new typographic tools that have contextual awareness which integrates more intelligent algorithms to our workflows”.

Viljami Salminen (2016)

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Justification

- In this context of hyperconnection and continuous interaction with the environment, disciplines such as data visualization and interaction design are key.
- However, the literature consulted (Bollini, 2017; Sun, Leigh, Johnson and Lee, 2010) highlights the **need to delve deeper into the processes of signification** of graphical interfaces.
- In order to achieve this objective, the study of other fields such as graphic design applied to interfaces, and more specifically typography, is particularly relevant. According to Grégori Vincens and Jérémie Hornus (2017): “**Typography is the main interface between information and city residents**”.
- One of the revolutions that we have been experiencing in recent years in the typographic framework are the so-called **variable fonts**, which can be a response to the need for meaning in interfaces, since **their potential lies in turning typography into something *alive* that reacts and adapts to the environment**.



Presentation

- In this workshop we are going to apply a model that sets the groundwork for **establishing a significant relationship between variable typography and its application in graphical interfaces** from data collected by different sensors. The workshop is part of an investigation to validate the model developed.

Part I:

- Theoretical introduction to variable fonts.
- Putting into practice the concepts exposed.
- Theoretical / practical introduction to Iot through Arduino.
- Presentation of the Sensor Variable Font model.
- Ideation graphic interface

Part II:

- Prototype development.
- Presentation of projects.
- Completion of survey.
- We celebrate!

Bibliographic references

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Thank you very much for your attention

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