



ERCIM "ALAIN BENSOUSSAN"
FELLOWSHIP PROGRAMME



Scientific Report

First name / Family name	EVANGELOS / NIFORATOS
Nationality	HELLENIC
Name of the <i>Host Organisation</i>	NTNU
First Name / family name of the <i>Scientific Coordinator</i>	MICHAIL / GIANNAKOS
Period of the fellowship	01/05/2020 to 31/12/2020

I – SCIENTIFIC ACTIVITY DURING YOUR FELLOWSHIP

For the period this fellowship lasted, we were able to develop and test the 2nd version of our EEGlass prototype based on the frame of the Vuzix Blade smart glasses [1]. Due to the March-May 2020 COVID-19 lockdown, and the subsequent summer vacations, the evaluation study of the EEGlass prototype was conducted over October and November 2020 on the verge of yet another lockdown. Despite the fact that we had to follow additional disinfection protocols against the spread of the COVID-19 pandemic, we were able to finalize our experiments in time. We are currently in the process of analysing data from 34 healthy participants (N=34) that used EEGlass in conjunction with the established Enobio 20 electroencephalography system, while performing a series of established cognitive tests. We expect we will publish our findings in the 1st quarter of 2021.

II – PUBLICATION(S) DURING YOUR FELLOWSHIP

1. Evangelos Niforatos, Athanasios Vourvopoulos, and Michail Giannakos. Endowing Head-Mounted Displays with Physiological Sensing for Augmenting Human Learning and Cognition. In *Proceedings of CrossMMLA in practice: Collecting, annotating and analyzing multi-modal data across spaces co-located with 10th International Learning and Analytics Conference (LAK 2020)*, pages 1–4, 2020

Editing

“Technology-Augmented Perception and Cognition” volume to appear in Human-Computer-Interaction Series by Springer (due March 19, 2021):

<https://www.springer.com/gp/book/9783030304560>

**III – ATTENDED SEMINARS, WORKHOPS,
CONFERENCES**

CrossMMLA at LAK 2020: Virtual Event at Frankfurt Germany with the 10th International Learning Analytics Conference (LAK 2020).

IV – RESEARCH EXCHANGE PROGRAMME (REP)

Scheduled research visits were cancelled due to COVID-19 pandemic.