

Preface

This volume contains the refereed papers presented at the International Conference on Brain Function Assessment in Learning, BFAL 2017, held on September 24–25, 2017 in Patras, Greece. The conference is the first in a multidisciplinary domain that regroups specialists in neuroscience, computer science, medicine, education, human-computer interactions, and social interaction. It promotes a cross-disciplinary approach to better understanding how to use the brain's capabilities to improve cognition and learning. The benefits cover a large variety of applications and this conference opens the way to collaborative projects and research as the synergy of all these disciplines is important to strengthen the impact and scope of the results.

The convergence of cognitive studies, tools of artificial intelligence, neuroscience approaches, and health applications opens a new era of multidisciplinary research tracks. The emergence of new assessment devices allows new ways of experimentation in laboratories, with light, non-intrusive, and low-cost sensors. Industrial representatives of relative technology were also invited to present their tools and equipment.

The conference gives the participants the opportunity to examine multiple applications of brain function assessment in learning—mainly in the education and health fields—which are becoming more and more promising. For example, knowing the brainwave activity and the condition of a user, researchers can detect whether he/she is not concentrating, or is over busy, hyperactive, anxious, not motivated, and they can apply corrective methods to provide calm, relaxation, and better receptivity to allow a better transfer of knowledge and life conditions.

There were 28 submissions. Each submission was reviewed by at least 1, and on average 2.4, Program Committee (PC) members, according to a double-blind process. The PC decided to accept 22 papers. Sixteen of these were accepted as full papers, and 6 were accepted as posters. The program also included 2 invited talks from well known researchers.

We would like to thank all the 32 members of the multidisciplinary Program Committee for their constructive work in making suggestions and improvements to the papers, and all the authors for contributing to an innovative program. This conference would never exist without the strong involvement of Kitty Panourgia, the organization chair, and her excellent NEOANALYSIS team (Katerina Milathianaki, Isaak Tselepis, Natalia Kakourou, and Alexia Kakourou).

The conference was organized under the auspices of the University of Patras and we would like to thank the university authorities and administration for contributing to the emergence of this new multidisciplinary conference.

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