Πρόγραμμα Μεταπτυχιακών Σπουδών Εξειδίκευσης
του Τμήματος Ελληνικής Φιλολογίας του Δημοκριτείου Πανεπιστημίου Θράκης
σε συνεργασία με το
ΕΚΕΦΕ Δημόκριτος – Ινστιτούτο Πληροφορικής και Τηλεπικοινωνιών
με τίτλο: «Εξειδίκευση στις Τ.Π.Ε. και Ειδική Αγωγή – Ψυχοπαιδαγωγική της ένταξης»

ΤΑ ΣΥΣΤΗΜΑΤΑ ΔΙΕΠΑΦΗΣ ΑΝΘΡΩΠΙΝΟΥ ΕΓΚΕΦΑΛΟΥ – ΥΠΟΛΟΓΙΣΤΗ (BCI) ΩΣ ΕΡΓΑΛΕΙΑ ΠΑΡΕΜΒΑΣΗΣ ΣΤΗ ΔΙΑΤΑΡΑΧΗ ΑΥΤΙΣΤΙΚΟΥ ΦΑΣΜΑΤΟΣ

BRAIN – COMPUTER INTERFACE SYSTEMS AS INTERVENTION TOOLS IN AUTISM SPECTRUM DISORDER

της

Αλεξοπούλου Αρχοντούλας

Μεταπτυχιακή διατριβή που υποβάλλεται
Στην τριμελή επιτροπή για την απόκτηση του μεταπτυχιακού τίτλου του
Προγράμματος Μεταπτυχιακών Σπουδών Εξειδίκευσης
Του Τ.Ε.Φ. – Δ.Π.Θ. σε συνεργασία με το Ε.Κ.Ε.Φ.Ε. Δημόκριτος – Ινστιτούτο Πληροφορικής και Τηλεπικοινωνιών
Με τίτλο: «Εξειδίκευση στις Τ.Π.Ε. και Ειδική Αγωγή – Ψυχοπαιδαγωγική της Ένταξης»

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Αθήνα/Κομοτηνή

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1. Περίληψη / Abstract

Ο αυτισμός είναι μια διάχυτη αναπτυξιακή διαταραχή με νευροφυσιολογικό υπόβαθρο, πολυπαραγοντικής αιτιολογίας και τρόπου εκδήλωσης. Η φύση της διαταραχής και η δυσκολία σχεδίασης και εφαρμογής επιτυχημένων μοντέλων ουσιαστικής παρέμβασης, δημιούργησε την ανάγκη να στραφεί η επιστημονική κοινότητα στην αναζήτηση και εφαρμογή παρεμβατικών πρωτοκόλλων διαφορετικού είδους και φιλοσοφίας. Η εφαρμογή πρωτοκόλλων παρέμβασης μέσω συστημάτων διεπαφής ανθρώπινου εγκεφάλου – υπολογιστή αποτελεί μία από αυτές τις νέες προσεγγίσεις. Η παρούσα διπλωματική εργασία στοχεύει στην κριτική διερεύνηση μη επεμβατικών εφαρμοσμένων πρωτοκόλλων τέτοιου είδους, εξετάζοντας το είδος τους, τον τρόπο εφαρμογής τους αλλά και την αποτελεσματικότητά τους. Η διερεύνηση πραγματοποιήθηκε στα επίσημα δημοσιευμένα πρωτόκολλα της τελευταίας δεκαετίας, επικεντρώνοντας στο ηλικιακό φάσμα 4-21 ετών.

Autism is a pervasive neurodevelopmental disorder of multifactorial causation and phenotypical variation. The nature of the disorder together with the difficulty in planning and implementing highly effective treatment models, have directed the scientific research towards discovering and implementing new intervention models, of different type and philosophy. Brain – computer interface systems as intervention tools in autism comprise an approach consistent with the demands of the new era. The dissertation aims at examining applied, non-invasive research protocols of this kind, placing emphasis on the way they were implemented and their effectiveness. The review was conducted on published research in the last decade, concerning ages 4-21.

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