

PhD position for the ADAPTIVE Project

The Department of Industrial Engineering at Ariel University invites applications for a 4-year PhD position associated with the ADAPTIVE Project.

The purpose of the project is to increase the effectiveness of Driver Feedback Systems (DFS) such as collision warning systems and driving monitoring systems by adjusting their feedback according to drivers' physiological responses. Adjusted feedbacks are expected to generate greater trust and acceptance from drivers and therefore, to be more useful in maintaining safer driving.

In his/her PhD, the successful candidate will study the relationship between kinematic indices from state-of-the-art DFSs and physiological indices and develop methods for utilizing driver physiological data to adjust DFS feedback. A selected number of system modes (e.g. with/without use of physiological data) will be tested to assess the effects of adjusted feedbacks.

Responsibilities and tasks

1. Managing and conducting large-scale longitudinal experiments to collect physiological and kinematic indices.
2. Analyzing and discovering patterns of change in kinematic and physiological indices according to traffic situations.
3. Developing and testing new ways for using physiological and kinematic data by in-vehicle feedback systems.
4. Advising undergraduate students in various ADAPTIVE sub-projects.

Qualifications

1. The successful applicant will be a great team player with a profound interest in research and an "I can" attitude.
2. An MSc degree in engineering or other academic degree with equivalent training.
3. Background in signal processing and in data analysis.
4. Experience in java programming.

Appreciated

1. Experience in longitudinal experimental studies.
2. Experience in analysis of physiological data.
3. Proficiency in English.
4. Ability to present results in technical reports, and prepare scientific papers for publication in international journals.

We offer

We offer an interesting and challenging position in a "start-up" environment, focusing on education, research, and innovation. We strive for academic excellence, mutual respect, and freedom of thinking. Ariel University, Israel's newest university is evolving into a major institution of research and higher education and taking its place among the ranks of Israel's universities.

Salary and appointment terms

The salary and appointment terms are consistent with Ariel University reward program for PhD students. The period of employment is 4 years. The place of work will be at Ariel University Campus, Israel.

Further information

You are welcome to contact Associate Professor Musicant Oren orenm@ariel.ac.il.