## PhD Position in Biomedical signal processing

## **Position Description:**

One Ph.D. research position is available in the **Ben-Gurion University of the Negev** (BGU), Biomedical Engineering Department, **Biomedical Signal Processing Research** Laboratory, in the frame of a research project on audio and biomedical signal processing and pattern

**Laboratory**, in the frame of a research project on audio and biomedical signal processing and pattern recognition.

The research activities include the **design and evaluation of digital signal processing (DSP) and pattern recognition algorithms for the evaluation of sleep and sleep disorders**. The research will be carried out in the Biomedical signal processing research laboratory, BGU, under the supervision of **Dr**. **Yaniv Zigel**. The standard duration of a Ph.D. research project at BGU is 4 years.

**RESPONSIBILITIES**: The Ph.D. researcher will

- carry out research on the design and evaluation of audio and physiological signal processing algorithms;

- write high-quality scientific journal papers,

- monitor the work plan of the research project and make sure that milestones are achieved and deliverables are finalized in a timely manner;

- actively participate in internal research and project meetings;
- assist in the supervision of BSc/Master thesis students;

- perform a limited amount of teaching assistant activities.

**PROFILE** - Candidates must hold a Master degree in Biomedical Engineering or Electrical Engineering (or equivalent), have a solid mathematical background and have taken specialized courses in at least three of the following disciplines: digital signal processing, physiological signal processing, statistical signal processing, speech processing, audio signal processing, pattern recognition, machine learning, acoustics. - Research experience in digital (audio) signal processing is <u>required</u>. – Good experience with Matlab programming is <u>required</u>, and experience with other programming languages (C/C++/Python/...) is considered beneficial. - Excellent proficiency in the English language is required, as well as good communication skills, both oral and written.

**OFFER** - A Ph.D. title from BGU. - A thorough scientific education in the frame of a doctoral training program. - A PhD grant. - A one-year position with the possibility of extension for a second, third, and fourth year.

**Applications** are to be submitted to **Dr. Yaniv Zigel** (Email: <u>yaniv@bgu.ac.il</u>). Please submit: 1) a short motivation letter with a statement of skills and research interests 2) a curriculum vitae (CV) including academic grades/results, 3) the names and contact information of 2 references.



