Postdoctoral Position in Eye Movement Biometrics and Health Assessment Department of Computer Science, Texas State University

Postdoctoral position is under supervision of Dr. Komogortsev.

## **Duties and Responsibilities:**

Assist with research associated with improving the state of the art in the eye movement biometrics domain. That will include improving the biometrics accuracy of the technology and working on its counterfeit resistance.

The work will also include aspects of health assessment including detection of such events as concussion and fatigue. The assignments might involve working with various oculomotor plant models and representations of the brain activity that can be extracted from the eye movement signal. The work will entail mathematical modeling, coding, and conducting user studies, and publishing research outcomes. Special emphasis would be put on incorporating eye movement-driven biometrics methods into wearable mobile devices such as Google Glass, HoloLens, etc.

The position might also require working with novel eye tracking solutions in hardware.

Short video of what is done in the lab is published here: <a href="https://www.youtube.com/watch?v=-qffJXDINel">https://www.youtube.com/watch?v=-qffJXDINel</a>

Overview presentation for the research conducted in the lab is represented by a presentation given at Microsoft Research:

http://research.microsoft.com/apps/video/default.aspx?id=218094

Recent lab's publications on this topic: <a href="http://cs.txstate.edu/~ok11/publications.html">http://cs.txstate.edu/~ok11/publications.html</a> In the news: search "eye movements password"

Position Sponsor: Google, National Science Foundation, National Institute of Standards.

## Qualifications:

The candidates are expected to have:

- A doctoral degree in either in Computer Science, Mathematics, Psychology, Neuroscience or a closely related area
- A good track record in scientific research.
- Good English proficiency is a necessary prerequisite.
- Good programing skills in such languages as MATLAB, C/C++, C# are expected. Previous experience with eye movement/biometrics/mathematics/machine learning/signal processing research is a plus.

## Application:

Documents Required (pdf):

- Letter of interest (1 page). In this letter please indicate your desired duration of stay in the postdoc position at the HCI lab and your career plans after the postdoc position is completed.
- Research statement (1 page)
- Curriculum vitae (include current mailing address)
- List of 3 professional references w/contact information.

Send materials directly to ok at txstate.edu with the subject line "Postdoc: Eye Movement Biometrics and Health Assessment"