Applicant Tracking Software Research

Jeffrey B. Mulligan. 2012. A GPU-accelerated software eye tracking system. In Proceedings of

the Symposium on Eye Tracking Research and Applications (ETRA '12). Association for

Computing Machinery, New York, NY, USA, 265–268.

https://doi.org/10.1145/2168556.2168612

Modern microcomputers are powerful enough to implement a real-time eye-tracking

system, but the operating system limits the types of algorithms that can be implemented in real

time. Real-time eye-tracking systems could be employed in a variety of scientific applications,

including brain-computer interface development, psychophysical testing, and the investigation of

brain disorders. A variety of modern operating systems such as Windows, MacOS, or Linux are

generally capable of performing a variety of eye-tracking tasks at the cost of higher

computational overhead. However, the use of conventional software is limited by certain

technical barriers such as power and speed. This paper describes a technique that overcomes

these technical barriers to create a real-time eye-tracking system. Many GPUs commonly used in

visual monitoring applications can be accelerated if processing is delegated to a graphics

processing unit (GPU). This document describes a real-time visual inspection system developed

using the CUDA programming environment distributed by NVidia. The current implementation

of the system can process a 640 by 480 image in less than 4 milliseconds and achieve an

accuracy close to 0.5 degrees of field of view.

Laumer, S., Maier, C., & Eckhardt, A. (2015). The impact of business process management and

applicant tracking systems on recruiting process performance: an empirical study.

Zeitschrift Für Betriebswirtschaft, 85(4), 421–453.

This research focuses on the impact of different aspects of business management and information technology on the effectiveness of the investment process. The results of a survey of 1000 large German companies show that business analysis, business improvement and the use of management systems reduce the cost of investment. Investment cycle time can be significantly reduced by monitoring and reviewing business processes and using a tracking system. Candidates support the development and evaluation of key performance indicators. Business process design, integration with recruitment processes and business process data, and these processes in combination with business practice management, have a significant positive impact on stakeholder satisfaction in the investment process. The overall quality of the process can be improved through business management as well as the integration of candidate search and business management. Findings show that many aspects of business management, combined with a process for finding candidates, influence the effectiveness of recruiting in different ways. This article discusses the various effects of business management on performance and provides information for evaluating the success of information systems. A business owner and manager of a company should know it can be hard to manage every part of the business and still make sure get the most efficient recruitment process possible. With all the changes in recruitment process, technology, and personnel within an organization, it can be a daunting task to stay on top of things.

Sreyasi, B., Rocio, B., Brewe, E., Potvin, G., Julian, E., Marcy, K., & Kramer, L. (2022). Institutionalizing evidence-based STEM reform through faculty professional development and support structures. International Journal of STEM Education, 9(1) doi:https://doi.org/10.1186/s40594-022-00353-z

Although student-centered learning leads to better outcomes for students, it still maintains the right teaching methods. Many barriers prevent teachers from using more student-centered, evidence-based, and specialized approaches to the teaching support needed to promote teacher change. Collaborative for Institutionalizing Scientific Learning (CISL) is an HHMI-funded program aimed at reforming student and mathematics education at a large Hispanic public research university. The program developed a teacher support model for influencing the number of science and math teachers using the methods tested in their classrooms. The program selects scholars to lead the reform course of their choice and assess the impact of the reform on students while receiving a range of support including summer salaries, academic support, professional development, course evaluations, and educational research. support and opportunities to develop literature in their change process. CISL has supported more than 40 professor-teachers in the transition of first and second-degree courses in biology, chemistry, physics, and mathematics. Teachers are motivated to change course due to factors related to their own experiences and beliefs, student needs, class structure, and faculty elements. Statistical analysis of the impact of the project on student achievement shows that, in general, students who receive CISL support perform better than students in regular grades. Faculty surveys and interviews with scholars indicated that the most important aspects of the program were the support of the university faculty during the implementation of the reform and the guidance of the Deputy Program Director during design, implementation, and evaluation. The CISL program is an example of a major effort over the years to improve the quality and culture of higher education in a large Latin American research community. The whole program had a positive impact on the development of the professional skills of the school members and led to an increase in the number of STEM

courses using proven methodologies, thus taking a step towards strengthening the culture of the internal training model STEM Department.