הטכניון - מכון טכנולוגי לישראל

TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY

הפקולטה להנדסה כימית
ע״ש וולפסון
The Wolfson Department of Chemical Engineering

Wolfson Department of Chemical Engineering Seminar
Lecture Hall 6, Wolfson Department of Chemical Engineering,
Wednesday May 2nd at 1:30pm

Dr. Assaf Thon

CandorMap

Reality Assessment behind New Inventions

There is a fair amount of frustration among academics that come up with new ideas, inventions or new technologies, where only few are given a serious consideration, not to say being implemented. Several reasons leads to this situation. One is the need for academics who also practice entrepreneurship to defocus from their main research expertise. Another reason is the lack of simple, accessible and reliables tools to find, process and bring information to act upon while assessing new inventions. As a result, professionals and executives struggle to make the right decisions based on the information available today. We aim to reduce this pain by introducing a new online, automatic and interactive tool to guide and assist researchers, inventors and entrepreneurs in the early stages of assessment of new inventions. We use patents and scientific articles, an ever-growing source of data, covering almost every aspect of innovation. On the other hand, as a source of business and technology information, patents are critically under utilised.

Using Text Mining algorithms we have developed a system that can rank the semantic similarities between pairs of technical / scientific documents. Using Big Data methods and frameworks the system is able to created the global semantic map of patents. Any new idea, invention, scientific publication or technology description can be placed on the map showing its immediate similar patents. The system is designed for technology experts who have no prior experience in patent search, neither the knowledge to extract the right information from patent data. The information the system provides is actionable in the sense it makes critical actions every entrepreneur should take even before consulting with patent and market experts, such as:

- Ask who was there before me, by conducting initial prior art search
- Perform initial freedom to operate analysis by finding out who's toes I am stepping on
- Identify potential threats on the invention and business opportunities around it
- Analyse innovation trends around the invention
- Plan and design for possible routes to be taken regrading the technology and business development of the invention

Aspects of the methods and algorithms used to develop the system will be described. The seminar is intended for faculty members, research staff and students. Live demos and examples will be included.

Refreshments will be served at 1:15pm