MOVING

ISSUE 4

SEPTEMBER 2018

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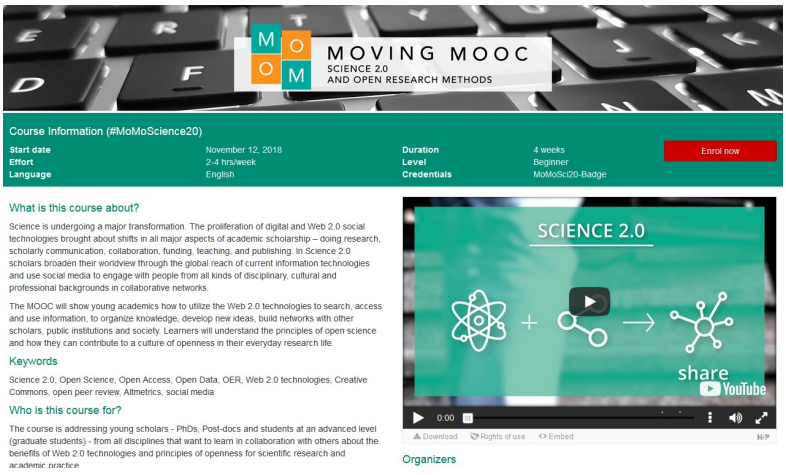
Welcome to our fourth Newsletter

The MOVING project is now in its final year, and lots of exciting developments are witnessed in many fronts. For instance, we are pleased to announce that the registration for our MOVING MOOC "Science 2.0 and open research methods" is open! New video tutorials and demos are publicly available, showing the MOVING-developed technologies and how these were integrated in the platform. In parallel to this and with the development stage almost completed, preparations for the evaluation of the MOVING platform with data captured from real users are under way. Finally, the MOVING consortium continued in this period to participate in several scientific and industrial events, such as the Open Science conference, and to organise activities, such as a course at UNESCO's Workshop on Open Education Design.

Registration for the MOVING MOOC is open!



MOVING is organising a MOOC on "**Science 2.0 and open research methods**". In the MOOC young scholars will learn to use web-based social technologies and online communities not just as an object of study, but also as way of conducting research: to build networks, discuss findings, and collaborate with scholars (globally) across disciplinary, cultural and geographical boundaries. Participants in the MOOC will learn how the use of social technologies together with movements like Creative Commons offer entirely new ways to publish, share, discuss and reproduce scientific findings and data. Mastering these social technologies and web-based tools will provide them with the opportunity to create scholarly innovations and make their own scientific findings accessible to a broader public.

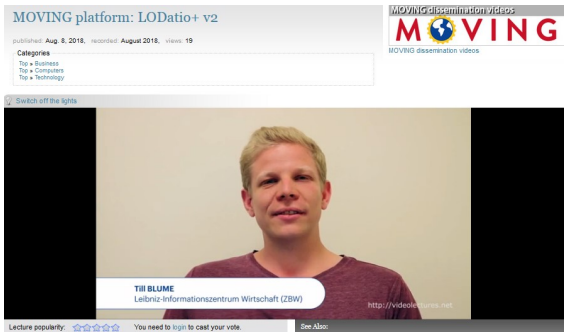
The MOOC starts **November 12th, 2018** on the MOVING platform. For more information watch this short video: https://youtu.be/Z4xUHy3QGDE, visit the MOVING website, and follow the MOOC organisers on Twitter **@MoMoSci20**. Register for the MOOC on: https://moving.mz.tu-dresden.de/mooc.

The MOOC will be held on the MOVING platform where we provide a combined space for research, collaboration and training. Movements like Open Data, Open Access, and Open Educational Resources that advocate the free access to knowledge for everyone have broad implications for the excellence of research – its creativity, productivity, reliability, and validity and require a new set of competences and attitudes for young researchers to thrive in this environment. That is why we created this MOOC.

Tools - Demos - Results

MOVING tutorials and videos

MOVING tutorials and demos



Till Blume presenting the LODatio+ search engine of the MOVING platform

For our project's dissemination and exploitation, and in the scope of the MOVING learning environment, partner JSI together with all other members of the consortium filmed short video tutorials and demos explaining the MOVING developed technologies and how they are integrated in the MOVING platform. The whole technical tutorials and demos repository is available at http://videolectures.net/moving_videos/, at the MOVING project site, and is also being integrated in the MOVING platform's learning environment.

New and improved technologies, visualisations and learning materials in the MOVING platform

New technologies and learning materials in the MOVING platform

The latest public version of the MOVING platform is now live under https://moving.mz.tu-dresden.de/. It includes a wealth of new or updated functionalities, and new learning materials within the search environment. Examples of new or updated functionalities include the faceted search, which has been revised and enriched, and can now be used in many ways; and, improved visualisations (uRank, Concept Graph) that have been further adapted to the requirements and suggestions of the users of the platform. New learning materials include more documents, datasets and crawled websites that are continuously being indexed, and for which more metadata are also added thanks to the updated crawlers, enhancing the quality of the data; and of course the MOVING MOOC, for which registration (via the MOVING platform) is open – the MOOC itself will start being delivered in mid-November.

MOVING's lecture video fragmentation technologies

Video lecture fragmentation technologies

MOVING has been working on developing new and more effective methods for lecture video fragmentation and fragment-level annotation, to allow for fine-grained access to lecture video collections. Our latest method for lecture video fragmentation was recently accepted for presentation and publication in the 2019 Multimedia Modeling conference (MMM 2019). According to this method, only automatically-generated speech transcripts of a video are examined, and these are analysed with the help of word embeddings that are generated from pre-trained state-of-the-art neural networks. In addition to developing this new approach, in our accepted MMM 2019 paper we address a major problem of video lecture fragmentation research, which is the lack of large-scale datasets for evaluation. We address this by presenting a new artificially-generated dataset of synthetic video lecture transcripts, based on real VideoLectures.NET data, and we make this new dataset publicly available to the research community.

This lecture video fragmentation method is part of the MOVING platform, and its results are also being ingested in the VideoLectures.NET platform, making it possible for the users of both platforms to access and view specific fragments of lecture videos that cater to their information needs.

MOVING platform evaluation

During the following months, we will evaluate the MOVING platform in the wild. Interaction data captured from real users will be analysed using data-driven techniques to get insights into the workflows exhibited by the users, understand how the available functionalities are used and identify potential usability problems. The evaluation of the platform and its widgets, such as the Adaptive Training Support and data visualisations, will ensure the MOVING platform fulfils our expectations and matches the requirements set in the project.

Communication and dissemination activities

MOVING session at UNESCO's Workshop on Open Education Design

The UNESCO Chair on Open Technologies for Open Educational Resources and Open Learning at the Jožef Stefan Institute, together with the University of Nova Gorica, organised a 5-day course on Open Education Design in Vipava, Slovenia (2-6 July 2018). The aim of the course was to equip the participants with basic knowledge, practical advice and hands-on experience to prepare them for their own design of Open Educational Resources (OER). Lecturers and participants came from 17 countries. MOVING project partners CERTH, ZBW and JSI were among the lecturers. They presented MOVING and showcased, with a live demo, the MOVING platform to more than 30 participants of the course.

UNESCO workshop (group photo)

Dr I. Vagliano presenting MOVING

MOVING at the Data Driven Future Forum: Learning Analytics

MOVING presentation at the learning analytics event at Know-Center

On the 17th of April 2018 the Learning Analytics event: "Data Driven Future Forum: Learning Analytics – Daten Und Digitale Traces Zum Lernen" took place at the Know-Center in Graz, where results of the MOVING project were presented by Dr. Angela Fessl. More specifically, around 25 interested persons from industry (e.g. automotive industry, life sciences or publisher) as well as from science (Graz University of Technology, University of Graz, Medical University of Graz, FH Joanneum, Pro^{2}Future) and school (HTL Leoben) came to the event. Dr. Angela Fessl, one of the researchers in the MOVING project, presented the MOVING platform, including the two widgets for providing adaptive training support. Her presentation included not only how meaningful reflection guidance can be applied in order to motivate people to improve their own search behaviour, but also how guidance can be provided to follow a pre-defined learning path through a curriculum to improve the own competence on information literacy. The subsequent discussion was very fruitful and vital, showing that people from industry, science and school are very interested in the topics we address in the MOVING project.

MOVING participation in the Open Science Conference

MOVING participation at the Open Science Conference

The MOVING presentation by Prof. Dr. Thomas Köhler

MOVING participated in the International Open Science Conference 2018 held in Berlin, Germany, in March 13-14 2018, by having a stand with demos and videos at the main congress exhibition hall during the first day of the event. The event was an opportunity for presenting the latest developments in various MOVING-related technologies (video understanding, advanced visualisation, search technologies, smart learning etc.) to the over 200 participants from different sectors (EC, companies, policy makers), including teachers, researchers, linguists, IPR lawyers, public administrators etc. The participants were from different countries and continents (Germany, UK, Spain, Italy, Greece, USA, etc.). This participation made possible the exchange of contacts, for investigating further cooperation possibilities. The MOVING stand featured MOVING flyers and a smart screen to demo the latest version of the MOVING platform. In addition, visiting cards with a QR code and a special link to the platform were distributed to encourage people to try the platform themselves. Overall, the International Open Science Conference 2018, organised by the Leibniz Research Alliance Science 2.0, was dedicated to the Open Science movement and provided a unique forum for researchers, librarians, practitioners, infrastructure provider, policy makers, and other stakeholders to discuss and exchange their ideas and experiences. The congress attracted high-profile policy makers, among them the Head of Unit A6, DG Research and Innovation, European Commission, the President of the Leibniz Association and the German State Secretary at the Federal Ministry of Education and Research (BMBF). For more details on the conference in general you can visit https://www.open-science-conference.eu/ .

The MOVING platform visiting card

MOVING at FTA 2018

MOVING at the European's Commission – DG JRC event: FTA 2018

Group photo from the FTA 2018 event

The MOVING strategy building background was presented at the 6th conference FTA 2018 – Future oriented technology analysis 2018 – "Future in the making" held in Brussels, Belgium, on 4-5 June 2018. The talk entitled: "Strategy building for a knowledge repository with a novel expert information fusion tool" was given by Prof. Dr. Andrzej M.J. Skulimowski from PBF, in the session C2 "Horizon Scanning & Beyond". The conference was organised by the European Commission – DG (Directorate-General) JRC. The presentation focused on the project's innovative approach to the MOVING platform's visionary planning, the application of novel online tools such as expert Delphi survey support system, anticipatory networks, and technological roadmapping. They have been deployed as tools within exploitation, community building and user group development tasks of the MOVING project in the dissemination and exploitation workpackage. The talk included also an overview of a novel approach to ensuring the sustainability of the MOVING digital knowledge platform. It provided an insight to the methodology of multicriteria platform exploitation assessment developed within the project. The ultimate goal of strategic planning within the dissemination and exploitation workpackage is to select a development strategy ensuring the viability and sustainable exploitation of the MOVING platform during the project durability period and beyond.

MOVING presentation at UNESCO's Mobile Learning Week

Consortium partner JSI organised a workshop session at the UNESCO conference "Mobile Learning Week", on 26-30 March 2018 in Paris, France. Mobile Learning Week is the United Nations's flagship ICT in education conference. The conference title for 2018 was "Skills for a connected world". In the JSI-organised workshop on March 26th, JSI presented artificial intelligence technologies for OER and open education. Among others, MOVING was also presented. The workshop was successful and attracted around 40 participants.

JSI presenting artificial intelligence technologies for OER and open education

Brief news: recent and upcoming events

- Two papers, on "Training Researchers with the MOVING Platform", by I. Vagliano, A. Fessl, F. Guenther, T. Koehler, V. Mezaris, A. Saleh, A. Scherp, I. Simic", and on "Temporal Lecture Video Fragmentation using Word Embeddings" by D. Galanopoulos, V. Mezaris, were accepted at the 25th Int. Conf. on MultiMedia Modeling (MMM 2019), Thessaloniki, Greece, January 2019.
- A paper on "Open Innovation in the Big Data Era with the MOVING Platform: An Integrated Working and Training Approach for Data-savvy Information Professionals" by I. Vagliano, F. Guenther, M. Heinz, A. Apaolaza, I. Bienia, G. Breitfuss, T. Blume, C. Collyda, A. Fessl, S. Gottfried, P. Hasitschka, J. Kellermann, T. Koehler, A. Maas, V. Mezaris, A. Saleh, A. Skulimowski, S. Thalmann, M. Vigo, A. Wertner, M. Wiese, A. Scherp, was accepted for publication in IEEE MultiMedia, 2018.
- A paper on "Using Adversarial Autoencoders for Multi-Modal Automatic Playlist Continuation" by I. Vagliano, L. Galke, F. Mai, A. Scherp was accepted for publication at the ACM RecSys conference in Vancouver, Canada, October 2018.
- A demo on "Digging for Gold: Motivating Users to Explore Alternative Search Interfaces" by A. Fessl, A. Wertner, V. Pammer-Schindler was presented at the European Conference on Technology Enhanced Learning (EC-TEL 2018), Leeds, Great Britain), September 2018.
- A paper on "What to Read Next? Challenges and Preliminary Results in Selecting Representative Documents" by T. Beck, F. Böschen, A. Scherp was presented at the DEXA 2018 International Workshops, BDMICS, BIOKDD, and TIR, Regensburg, Germany, September 2018.
- A paper on "Towards an Incremental Schema-level Index for Distributed Linked Open Data Graphs" by T. Blume, A. Scherp was presented at the Learning, Knowledge, Data, Analytics Conference (LWDA 2018), Mannheim, Germany, August 2018.
- A paper on "Multi-Modal Adversarial Autoencoders for Recommendations of Citations and Subject Labels" by L. Galke, F. Mai, I. Vagliano, A. Scherp was presented at the 26th ACM User Modelling, Adaptation and Personalization Conference (ACM UMAP 2018), Singapore, July 2018.
- A paper on "Virtualizing face-2-face trainings for training senior professionals: a comparative case study on financial auditors" by V. Pammer-Schindler, S Thalmann, A. Fessl, J. Füssel was presented at the 5th Annual ACM Conference on Learning at Scale (L@S 2018), London, UK, London, June 2018.
- A paper on "Analyzing the Evolution of Vocabulary Terms and Their Impact on the LOD Cloud" by M. Abdel-Qader, A. Scherp, I. Vagliano was presented at the 15th Extended Semantic Web Conference (ESWC 2018), Crete, Greece, June 2018.
- A paper on "Survey and empirical comparison of different approaches for text extraction from scholarly figures" by F. Böschen, T. Beck, A. Scherp was published in the Multimedia Tools and Appllications journal, June 2018.
- Two papers, on "Effective Unsupervised Author Disambiguation with Relative Frequencies" by T. Backes, and on "Using Deep Learning for Title-Based Semantic Subject Indexing to Reach Competitive Performance to Full-Texts" by F. Mai, L. Galke, A. Scherp, were presented at the Joint Conference on Digital Libraries 2018 (JCDL 2018), Fort Worth, Texas, US, June 2018.
- A paper on "Towards Flexible Indices for Distributed Graph Data: The Formal Schema-level Index Model FLuID" by T. Blume, A. Scherp was presented at the 30th GI-Workshop on Foundations of Databases (Grundlagen von Datenbanken), Wuppertal, Germany, May 2018.

MOVING

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Know-Center
http://www.know-center.tugraz.at/

Institut Jožef Stefan
https://www.ijs.si/ijsw/JSI

ZBW-Leibniz Information Centre for Economics
http://www.zbw.eu/en/

The University of Manchester
http://www.manchester.ac.uk/

GESIS-Leibniz Institute for the Social Sciences
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Project Details

Full Title: "TrainInG towards a society of data-saVvy information prOfessionals to enable open leadership INnovation"

Project Identifier: H2020 - 693092

Start Date: 1st April 2016

End Date: 31st March 2019

Duration: 36 months

http://moving-project.eu/ @MOVING_EU

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 693092