

**Media Contact:**  
**Craig Sender**  
**Copyright Clearance Center**  
**(978) 646-2502 or [csender@copyright.com](mailto:csender@copyright.com)**

## **Copyright Clearance Center's Haralambos "Babis" Marmanis to Speak at Open Data Science Conference**

*CCC's Chief Technology Officer and Vice President,  
Engineering and Product Development to Present  
"Search: Beyond Lucene with Open Source Deep Learning Libraries"*

**Danvers, Mass. – [Copyright Clearance Center, Inc.](http://copyright.com)** (CCC), a global licensing and content solutions organization and the leading commercial document-delivery provider, announces that Haralambos "Babis" Marmanis, its Chief Technology Officer and Vice President, Engineering and Product Development, will speak at the [Open Data Science Conference](#) (ODSC) East at the Boston Convention & Exhibition Center on May 21 at 2:00 pm.

Marmanis will give an overview of how search results can be improved by taking into account the nature of the objects we search for (contextualization) and the type of user who seeks the results (personalization).

"Elasticsearch and Solr are used extensively today to enable search by making use of the Lucene library," said Marmanis. "The advent of OS toolkits such as TensorFlow and CNTK makes it possible to introduce deep learning algorithms for the purpose of improving the user experience, and to do so at very large scales."

Marmanis will also discuss implementations that rely on simple robust algorithms, such as Naive Bayes, and more complicated ones involving deep learning. His talk will cover broader aspects of real-world machine learning solutions such as software architecture and lifecycle.

Marmanis spoke earlier this month at the [Bio IT World Conference & Expo](#), a premier event showcasing the myriad of applications and technologies that drive biomedical research, drug discovery and development, and clinical and healthcare initiatives. He gave an overview of CCC's [RightFind™ XML for Mining](#) platform, the first commercial tool coupling content licensing with text mining-ready content.

“In the pharmaceutical and biomedical industries, easy access to the complete scientific corpus can become a catalyst for making discoveries in drug and treatment research,” said Marmanis. “Computational biologists and other researchers are now able to access full-text XML articles from the most sought-after peer-reviewed scientific journals to support their text-mining efforts.”

At the “Data Dilemma” event of the [2016 London Book Fair](#), Marmanis made a presentation on how Big Data holds big promise for science, business and the human condition to create new value, realize medical breakthroughs and better human lives.

“Of the world’s vast collection of data – information and creative works in every imaginable form, physical as well as digital – 90% came into existence in the last two years,” said Marmanis. “As Big Data grows ever bigger in our business, the burdens grow, too.”

Marmanis is a pioneer in adopting machine-learning techniques for industrial solutions, and a world expert in supply management. At CCC, he is responsible for driving the technology vision and the implementation of all software systems. Before joining CCC, Marmanis was CTO at Emptoris, a leader of supply and contract management software solutions. He holds a Ph.D. in applied mathematics from Brown University and a M.Sc. degree from the University of Illinois at Urbana-Champaign. He is the author of “[Algorithms of the Intelligent Web](#)” and “[Spend Analysis: The Window into Strategic Sourcing](#),” as well as numerous articles in peer-reviewed international scientific journals and technical periodicals.

### **About Copyright Clearance Center**

[Copyright Clearance Center](#) (CCC), with its subsidiaries [RightsDirect](#) and [Ixxus](#), is a global leader in content workflow, document delivery, text and data mining and rights licensing technology for thousands of publishers, businesses and academic institutions. CCC’s solutions provide anytime, anywhere content access, usage rights and information management while promoting and protecting the interests of copyright holders. CCC serves more than 35,000 customers and over 12,000 copyright holders worldwide and manages more than 950 million rights from the world’s most sought-after journals, books, blogs, movies and more. Since 2008, CCC has been named one of the top 100 companies that matter most in the digital content industry by *EContent Magazine*. The company has locations in the US, the UK, the Netherlands, Spain, Romania and Japan.