

ACM Member News



Wenwu Zhu's research on multimedia cloud computing is both topical and ground-

breaking; he is exploring how a cloud can perform distributed multimedia processing and storage, and provide quality of service provisioning for multimedia applications and services.

This research also focuses on how to allocate computing and communications resources between the cloud and clients, which includes mobile phones for multimedia applications, and services for good Quality of Experience.

Zhu was recruited to his post in the Computer Science Department of Tsinghua University under China's "1,000 People Plan" to enlist top academics and researchers; he previously was senior researcher/research manager at Microsoft Research Asia. Zhu is the inventor or co-inventor of more than 40 patents, and has published more than 200 refereed papers on multimedia communications and networking, and wireless communications and networking.

He says he is interested in "how to use social information to reduce the intention gap in the multimedia search and how to use social information to predict emotion for the individual person."

Zhu was part of a group of Chinese computer scientists and academicians awarded the ACM SIGMM award for Best Technical Paper in 2012, for the paper "Propagation-based social-aware replication for social video contents."

"I see a convergence of cloud media, social media, and mobile multimedia," Zhu says. "Cloud can help with mobile phones, which have very limited computing and storage capabilities. The cloud can become a 'base' and a 'powerhouse' to provide content and user information for mobile phone applications and services."

—Laura Didio

Open Source Opens a Host of Questions

Open source software has become a dominant force in the technology industry, and its impact on the legal and ethical landscape is profound. As open source becomes more prevalent, it raises a host of questions about intellectual property, liability, and the future of software development. The open source movement challenges traditional notions of ownership and control, and its growth has led to a re-examination of the legal and ethical implications of software creation and distribution. This article explores the challenges and opportunities presented by open source, and discusses the need for a new legal and ethical framework to address the unique issues it presents.

Open source software is defined as software whose source code is made available to the public, allowing anyone to view, modify, and distribute the code. This model of development has led to the creation of many successful software projects, including Linux, Apache, and the Python programming language. The open source model is often contrasted with the proprietary model, in which the source code is kept secret and the software is sold as a finished product. The open source model is based on the principles of transparency, collaboration, and community. It allows developers to work together to improve the software and to share their knowledge and expertise. This model has led to the development of high-quality software that is often more secure and more reliable than proprietary software.

However, the open source model also raises a host of legal and ethical questions. One of the most significant questions is about intellectual property. In the open source model, the source code is shared, and anyone can modify and distribute the code. This raises questions about who owns the code and who is responsible for any errors or security vulnerabilities. Another question is about liability. If a piece of open source software causes damage, who is responsible? The developer? The distributor? The user? These questions are not easily answered, and they highlight the need for a new legal and ethical framework to address the unique issues presented by open source.

The legal and ethical challenges of open source are not limited to software development. They also extend to other areas of technology, such as artificial intelligence and data privacy. As technology continues to advance, the legal and ethical challenges of open source will become even more complex. It is essential that we develop a new legal and ethical framework to address these challenges and to ensure that the benefits of open source are realized for all.

Further Reading

Patrick Lin, Keith Abney, and George A. Bekey (eds.)

Robot Ethics: The Ethical and Social Implications of Robotics, MIT Press, 2012, 386pp., <http://ndpr.nd.edu/news/31199-robot-ethics-the-ethical-and-social-implications-of-robotics/>

Richards, Neil M. and Smart, William
How Should the Law Think About Robots? (May 10, 2013). Available at SSRN: <http://ssrn.com/abstract=2263363> or <http://dx.doi.org/10.2139/ssrn.2263363>

Legal Challenges in an Age of Robotics, Stanford University, <http://www.youtube.com/watch?v=P021944l2LA>

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