Workshop Preview of the 2015 Eclipse Technology eXchange Workshop (ETX 2015)

Tim Verbelen
Ghent University
tim.verbelen@intec.ugent.be

Michael G. Burke Rice University mgb2@rice.edu

Abstract

The Eclipse platform was originally designed for building an integrated development environment for object-oriented applications. Over the years it has developed into a vibrant ecosystem of platforms, toolkits, libraries, modeling frameworks, and tools that support various languages and programming styles. The seventh ETX workshop provides a platform for researchers and practitioners to transfer knowledge about the Eclipse Platform and exchange new ideas. It is held in Pittsburgh, Pennsylvania on October 27th, 2015 and co-located with SPLASH 2015.

Categories and Subject Descriptors D.2.0 [Software Engineering]: Programming Environments

Keywords Eclipse platform; integrated development environment

1. Introduction

The Eclipse project [7] started as a platform for building an integrated development environment for object-oriented applications. Over the years it has developed into a vibrant ecosystem of different platforms, toolkits, libraries, modeling frameworks, and tools that support various languages and programming styles, driven by a large number of individual contributers as well as companies. Today, Eclipse is not only an important tool for building software, it is also a frequent subject for software engineering studies due to its large code base, bug tracking database, and having the largest coordinated release train in the open source ecosystem.

ETX has been a very successful workshop at OOPSLA from 2003-2007 [1-4, 6]. In 2014, ETX was revived and

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SPLASH Companion'15, October 25–30, 2015, Pittsburgh, PA, USA ACM. 978-1-4503-3722-9/15/10 http://dx.doi.org/10.1145/2814189.2833198 took place co-located with SPLASH 2014 [5]. We feel that Eclipse is still very relevant in research and software engineering.

The goal of the ETX workshop is to bring together researchers and practitioners to exchange ideas about potential new uses of Eclipse and how Eclipse technology can be leveraged, improved, and/or extended for research and education.

In this edition, we will combine presentations of research papers with two invited talks of renowned experts in the Eclipse community.

2. Areas of Interest

Workshop topics include, but are not limited to, the use of Eclipse for:

- Integrated Development Environments (IDEs)
- Supporting the software development process
- Debugging and testing of software
- Supporting design, requirements and specifications
- Modeling environments and frameworks
- Aspect-oriented programming
- Program analysis and transformation
- OSGi
- Eclipse for Cloud development and DevOps
- Eclipse for developing the Internet of Things (IoT)
- Eclipse for building Rich Client Applications
- Eclipse for mobile application development
- Computer-based learning
- Software engineering education
- Courseware

3. Workshop Organization

Organizers

Michael G. Burke (Rice University, USA)

Michael G. Burke has been a Senior Research Scientist and

Instructor in the Computer Science Department at Rice University since 2009. His research interests include programming models for high performance parallel computing and static analysis-based tools for: programming language optimization; database applications; mobile security; compiling for parallelism. He was a Research Staff Member at the IBM Thomas J. Watson Research Center from 1983 to 2009, and a manager there from 1987 to 2000. He was the IBM Eclipse Innovation Grant Research Coordinator from 2003 through 2006. He has organized a variety of Eclipse technical meetings at leading conferences, such as Eclipse workshops and receptions/poster sessions at OOPSLA, ICSE, ETAPS, and ECOOP. He is an author or coauthor of more than 50 technical papers and 11 patents. Dr. Burke is an ACM Distinguished Scientist.

Tim Verbelen (Ghent University, Belgium) Tim Verbelen is a postdoctoral researcher at Ghent University and his primary research interests revolve around programming support for distributed computing in the Internet of Things. He has been using Eclipse technology in his research for a long time and is working in the Eclipse IoT group on Concierge, a low-footprint OSGi framework. He is author or coauthor of more than 20 technical papers. Dr. Verbelen is also an invited researcher of the OSGi Alliance.

Program Committee

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References

- M. G. Burke, editor. Proceedings of the 2003 OOPSLA Workshop on Eclipse Technology eXchange, October 2003, Anaheim, CA, USA. ACM, 2003.
- [2] M. G. Burke, editor. Proceedings of the 2004 OOPSLA workshop on Eclipse Technology eXchange, ETX 2004, Vancouver, British Columbia, Canada, October 24, 2004. ACM, 2004.
- [3] M. G. Burke, A. Orso, and M. P. Robillard, editors. Proceedings of the 2006 OOPSLA workshop on Eclipse Technology eXchange, ETX 2006, Portland, Oregon, USA, October 22-23, 2006. ACM, 2006.
- [4] L.-T. Cheng, A. Orso, and M. P. Robillard, editors. Proceedings of the 2007 OOPSLA workshop on Eclipse Technology eXchange, ETX 2007, Montreal, Quebec, Canada, October 21, 2007. ACM, 2007.
- [5] J. S. Rellermeyer and T. Verbelen. Etx'14: 2014 workshop on eclipse technology exchange. In *Proceedings of the Compan*ion Publication of the 2014 ACM SIGPLAN Conference on Systems, Programming, and Applications: Software for Humanity, SPLASH'14, pages 75–76, New York, NY, USA, 2014. ACM.
- [6] M.-A. D. Storey, M. G. Burke, L.-T. Cheng, and A. van der Hoek, editors. Proceedings of the 2005 OOPSLA workshop on Eclipse Technology eXchange, ETX 2005, San Diego, California, USA, October 16-17, 2005. ACM, 2005.
- [7] The Eclipse Project. www.eclipse.org.