

# Workshop Preview of the 3rd International Workshop on Programming for Mobile and Touch (PROMOTO 2015)

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## Abstract

Today, mobile devices (e.g., smartphones, tablets, smartwatches, etc.) are the main target platforms for developers. To support the new challenges, traditional programming languages are not enough and new ones are emergent to enable programmers (and end-users) to develop software that takes advantage of new hardware capabilities. Since the first edition in 2013, PROMOTO has brought together researchers interested in exploring new programming paradigms and embracing the new technologies in the area of touch-enabled mobile devices.

**Categories and Subject Descriptors:** D.2.3 Coding Tools and Techniques.

**General Terms:** Experimentation, Human Factors, Languages.

**Keywords:** mobile, touch

## 1. Introduction

PROMOTO brings together researchers who have been exploring new programming paradigms, embracing the new realities of always connected, touch-enabled mobile devices. After the success of the first two editions (in 2013 and 2014), PROMOTO 2015 would like to go in the same direction and invite contributions covering technical aspects of cross-platform computing, cloud computing, energy-aware systems, social applications, and security. The challenges of new types of devices and the introduction of mobile in the classroom are very important.

PROMOTO offers a unique blend of paper presentations, discussion forums, keynotes, and demos. Our 2015 keynotes feature Brad Meyers (Towards More Natural Programming for Mobile and Touch) and Jonathan Protzenko (Implementing real-time collaboration in TouchDevelop using AST merges). The accepted papers deal with two main topics:

- Development of mobile apps [1, 2]
- Development for touchscreens [3, 4]

Moreover, each of the authors will present a short demo on the tools described in their paper presentations.

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## 2. Workshop Organizers

Steven Fraser is based in Silicon Valley and has served as an innovation catalyst with global influence for three Fortune 500 Companies (Cisco, Qualcomm, and Nortel). In addition to a year as a Visiting Scientist at Carnegie Mellon University's Software Engineering Institute (SEI) consulting on Domain Engineering (software reuse) processes and practices he has organized over 75 software engineering conferences, panels, workshops, and tutorials. Steven holds a doctorate (Electrical Engineering) from McGill University in Montréal, Canada and is a senior member of both the ACM and the IEEE. His interest focuses on alleviating the "soft" challenges of developing and deploying products highly dependent on software and fostering industry-university research collaborations. He has organized panels and published papers focused on challenges in software engineering, including: collaboration [5, 6], privacy and security [7], technical debt [8, 9, 10], etc.

Alberto Sillitti, Ph.D., PEng is the Director of the Center for Applied Software Engineering, Italy. He holds a PhD in Electrical and Computer Engineering received from the University of Genoa (Italy) in 2005. He has been involved in several EU funded projects related to Open Source Software, Services Architectures, and Agile Methods in which he applies non-invasive measurement approaches. He has served as member of the program committee of several international conferences and as program chair of OSS 2007, XP 2010, and XP2011. His research areas include open source development, agile methods, software engineering, non-invasive measurement, mobile and web services. In the last few years, he has focused on mobile and energy-aware software development. He is author of more than 100 papers published in international conferences and journals focusing on open source [11, 12], development practices [13, 14, 15, 16, 17], mobile systems [18, 19, 20], data analysis [21], etc.

## References

- [1] B. Xie, I. Shabir, H. Abelson, "Measuring the Usability and Capability of App Inventor to Create Mobile Applications", 3<sup>rd</sup> International Workshop on Programming for Mobile and Touch (PROMOTO 2015), Pittsburgh, PA, USA, 27 October 2015.
- [2] J. Zaman, L. Hoste, W. De Meuter, "A Flow-Based Programming Framework for Mobile App development", 3<sup>rd</sup> International Workshop on Programming for Mobile and Touch (PROMOTO 2015), Pittsburgh, PA, USA, 27 October 2015.
- [3] P. Simonyi, J. Wilson, J. Brown, R. Biddle, "Supporting "What-If" in Touch-Screen Web Applications", 3<sup>rd</sup> International Workshop on

- Programming for Mobile and Touch (PROMOTO 2015), Pittsburgh, PA, USA, 27 October 2015.
- [4] M. Mirza, J. Wilson, R. Biddle, "Collaborative Annotations for Large Touchscreen Web Applications", 3<sup>rd</sup> International Workshop on Programming for Mobile and Touch (PROMOTO 2015), Pittsburgh, PA, USA, 27 October 2015.
- [5] S. Fraser, "Reflections on Software Engineering Research Collaborations: From Ottawa to the Software Engineering Institute to Silicon Valley", 2<sup>nd</sup> International Workshop on Software Engineering Research and Industrial Practice at ICSE 2015, Florence, Italy, 17 May 2015.
- [6] S. Fraser, D. Mancl, A. Namioka, R. Salama, A. Wirfs-Brock, "East meets west: the influences of geography on software production", SPLASH (Companion Volume) 2014, Portland, OR, USA, 20-24 October 2014.
- [7] S. Fraser, D. Campara, M. C. Fanning, G. McGraw, K. J. Sullivan, "Privacy and security in a networked world. SPLASH (Companion Volume) 2014, Portland, OR, USA, 20-24 October 2014.
- [8] D. Mancl, S. Fraser, "TD 2014: workshop on technical debt in a world of big data and big teams. SPLASH (Companion Volume) 2014, Portland, OR, USA, 20-24 October 2014.
- [9] S. Fraser, J. Bishop, B. W. Boehm, P. Kathail, P. Kruchten, I. Ozkaya, A. Szyrkarski, "Technical debt: past, present, and future (panel)", 35<sup>th</sup> International Conference on Software Engineering (ICSE 2013), San Francisco, CA, USA, 18-26 May 2013.
- [10] S. Fraser, D. Mancl, B. Opdyke, J. Bishop, P. Kathail, J. Lacar, I. Ozkaya, A. Szyrkarski, "Technical debt: from source to mitigation", SPLASH (Companion Volume) 2013, Indianapolis, IN, USA, 26-31 October 2013.
- [11] E. Petrinja, A. Sillitti, G. Succi, "Comparing OpenBRR, QSOS, and OMM Assessment Models", 6th International Conference on Open Source Systems (OSS 2010), Notre Dame, IN, USA, 30 May - 2 June 2010.
- [12] E. Di Bella, A. Sillitti, G. Succi, "A multivariate classification of open source developers", Information Sciences, Elsevier, Vol. 221, pp. 72 - 83, February 2013.
- [13] A. Sillitti, G. Succi, J. Vlasenko, "Understanding the Impact of Pair Programming on Developers Attention: A Case Study on a Large Industrial Experimentation", 34th International Conference on Software Engineering (ICSE 2012), Zurich, Switzerland, 2 - 9 June 2012.
- [14] I. Fronza, A. Sillitti, G. Succi, "An Interpretation of the Results of the Analysis of Pair Programming during Novices Integration in a Team", 3rd International Symposium on Empirical Software Engineering and Measurement (ESEM 2009), Lake Buena Vista, FL, USA, 15 - 16 October 2009.
- [15] I. Coman, A. Sillitti, "Automated Identification of Tasks in Development Sessions", 16th IEEE International Conference on Program Comprehension (ICPC 2008), Amsterdam, The Netherlands, 10 - 13 June 2008.
- [16] A. Jermakovics, A. Sillitti, G. Succi, "Mining and Visualizing Developer Networks from Version Control Systems", 4th International Workshop on Cooperative and Human Aspects of Software Engineering (CHASE 2011) at ICSE 2011, Honolulu, HI, USA, 21 May 2011.
- [17] I. Coman, A. Sillitti, "An Empirical Exploratory Study on Inferring Developers' Activities from Low-Level Data", 19th International Conference on Software Engineering and Knowledge Engineering (SEKE 2007), Boston, MA, USA, 9 - 11 July 2007.
- [18] L. Corral, A. Sillitti, G. Succi, "Mobile multiplatform development: An experiment for performance analysis", 9th International Conference on Mobile Web Information Systems (MobiWIS 2012), Niagara Falls, ON, Canada, 27 - 29 August 2012.
- [19] A. Sillitti, A. Janes, G. Succi, T. Vernazza, "Measures for Mobile Users: an Architecture", Journal of Systems Architecture, Elsevier, Vol. 50, No. 7, pp. 393 - 405, July 2004.
- [20] L. Corral, A. Sillitti, G. Succi, A. Garibbo, P. Ramella, "Evolution of Mobile Software Development from Platform-Specific to Web-Based Multiplatform Paradigm", 2011 ACM Symposium on New Ideas in Programming and Reflections on Software (SPLASH/Onward 2011), Portland, OR, USA, 22 - 27 October 2011.
- [21] W. Pedrycz, G. Succi, A. Sillitti, J. Iljazi, "Data description: A general framework of information granules", Knowledge-Based Systems, Elsevier, Vol. 80, pp. 98 - 108, May 2015.