

Proceedings of the Programming Experience 2019 Workshop (PX/19)

Message From the Chairs

Imagine a software development task: some sort of requirements and perhaps a platform and programming language. A group of developers head into a vast workroom. As they design, debate and program they discover they need learn more about the domain and the nature of potential solutions they are exploring via programming.

The *Programming Experience (PX) Workshop* is about what happens in that room when programmers sit down in front of computers and produce code, especially in an exploratory way. Do they create text that is transformed into running behavior (the old way), or do they operate on behavior directly ("liveness"); are they exploring the live domain to understand the true nature of the requirements; are they like authors creating new worlds; does visualization matter; is the experience immediate, immersive, vivid and continuous; do fluency, literacy, and learning matter; do they build tools, meta-tools; are they creating languages to express new concepts quickly and easily; and curiously, is joy relevant to the experience?

The focus of the workshop is characterizing the experience of programming and considering how to improve and evolve it.

PX/19 was the 5th edition of the PX workshop. It followed the Writers' Workshop format, was well attended, and left all participants with lively discussions that extended beyond the end of the workshop. Our post-workshop proceedings allowed authors to reflect on the feedback they got from the program committee and the workshop participants, and improve their submission.

We would like to thank our program committee, all workshop attendees, and most importantly our authors for their contributions, constructive criticism, hard work, and willingness to share their ideas.

—Luke Church, Richard P. Gabriel, Hidehiko Masuhara, and Robert Hirschfeld

Papers

IDVE: an Integrated Development and Verification Environment for JavaScript.
Christopher Schuster and Cormac Flanagan

Draw This Object: A Study of Debugging Representations.
Matúš Sulír and Ján Juhár

Faster Feedback Through Lexical Test Prioritization.
Toni Mattis, Falco Dürsch, and Robert Hirschfeld

Live Software Development—Tightening the feedback loops.
Ademar Aguiar, André Restivo, Filipe Figueiredo Correia, Hugo Sereno Ferreira,
and João Pedro Dias

The Meager Validation of Live Programming.
Johan Fabry

PolyJuS: A Squeak/Smalltalk-based Polyglot Notebook System for the GraalVM.
Fabio Niephaus, Eva Krebs, Christian Flach, Jens Lincke, and Robert Hirschfeld

Time Series Analysis of Programmer’s EEG for Debug State Classification.
Toyomi Ishida and Hidetake Uwano

What Can We Learn From Systems?
Luke Church and Mariana Marasoiu

Presentations

Projectional DSLs From the Ground Up
Meinte Boersma

Web

<http://programming-experience.org/px19/>
<https://2019.programming-conference.org/track/px-2019-papers/>

Program Committee

Titus Barik, Microsoft AI+Research, United States
Carl Friedrich Bolz-Tereick, Heinrich Heine University Düsseldorf, Germany
Parmit Chilana, Simon Fraser University, Canada
Luke Church, University of Cambridge, United Kingdom
Jonathan Edwards, United States
Richard P. Gabriel, Dreamsongs and Hasso Plattner Institute, California
Robert Hirschfeld, Hasso Plattner Institute, University of Potsdam, Germany
Jun Kato, National Institute of Advanced Industrial Science and Technology, Japan
Stephen Kell, University of Kent, United Kingdom
Stefan Marr, University of Kent, United Kingdom
Hidehiko Masuhara, School of Computing, Tokyo Institute of Technology, Japan
Jens Mönig, SAP, Germany
Yoshiki Ohshima, Viewpoints Research Institute, United States
Stephen Oney, University of Michigan, United States
Roland Perera, University of Glasgow, United Kingdom
Michael Perscheid, SAP Innovation Center, Germany
Ian Piumarta, Ritsumeikan University, Japan
Guido Salvaneschi, Technische Universität Darmstadt, Germany
Friedrich Steimann, FernUniversität in Hagen, Germany
Marcel Taeumel, Hasso Plattner Institute, University of Potsdam, Germany
Steven L. Tanimoto, University of Washington, United States
Hidetake Uwano, National Institute of Technology, Nara College, Japan
Alessandro Warth, Google, United States

Organizers

Luke Church, University of Cambridge, United Kingdom
Richard P. Gabriel, Dreamsongs and Hasso Plattner Institute, California
Robert Hirschfeld, Hasso Plattner Institute, University of Potsdam, Germany
Hidehiko Masuhara, School of Computing, Tokyo Institute of Technology, Japan



The Association for Computing Machinery
1601 Broadway, 10th Floor
New York, New York 10019, USA

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