# **Programming Experience 2020 Workshop**



April 23 (Mon) or 24 (Tue), 2020 Co-located with <Programming> 2020 in Porto, Portugal https://2020.programming-conference.org/track/px-2020-papers/ http://programming-experience.org/px20/

# Abstract

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?

Here is a list of topic areas to get you thinking:

- creating programs
- experience of programming
- exploratory programming
- liveness
- non-standard tools
- visual, auditory, tactile, and other non-textual languages
- text and more than text
- program understanding
- domain-specific languages
- psychology of programming
- error tolerance
- user studies

Correctness, performance, standard tools, foundations, and text-as-program are important traditional research areas, but the experience of programming and how to improve and evolve it are the focus of this workshop. In this edition we would like to focus on live, exploratory programming, but we also welcome a wide spectrum of contributions on programming experience.

# Submissions

Submissions are solicited for Programming Experience 2020 (PX/20). The thrust of the workshop is to explore the human experience of programming—what it feels like to program, or what it should feel like. The technical topics include exploratory programming, live programming, authoring, representation of active content, visualization, navigation, modularity mechanisms, immediacy, literacy, fluency, learning, tool building, and language engineering.

Submissions by academics, professional programmers, and non-professional programmer are welcome. Submissions can be in any form and format, including but not limited to papers, presentations, demos, videos, panels, debates, essays, writers' workshops, and art. Presentation slots will be between 30 minutes and one hour, depending on quality, form, and relevance to the workshop. Submissions directed toward publication should be so marked, and the program committee will engage in peer review for all such papers. Video publication will be arranged.

All artifacts are to be submitted via EasyChair (https://easychair.org/conferences/?conf=px20). Papers and essays must be written in English, provided as PDF documents, and follow the new ACM Conference 'acmart' Format with the 'sigconf' option using the Times New Roman font family with 10 point font size. If you are formatting your paper using LaTeX, you will need to set the '10pt' option in the '\documentclass' command. If you are formatting your paper using Word, you may wish to use the provided Word template that supports this font size. Please include page numbers in your submission for review using the LaTeX command '\settopmatter{printfolios=true}' (see examples in template). Please also ensure that your submission is legible when printed on a black and white printer. In particular, please check that colors remain distinct and font sizes are legible.

There is no page limit on submitted papers and essays. It is, however, the responsibility of the authors to keep the reviewers interested and motivated to read the paper. Reviewers are under no obligation to read all or even a substantial portion of a paper or essay if they do not find the initial part of it interesting.

#### Review

Submissions labeled as publications will undergo standard peer review; other submissions will be reviewed for relevance and quality; shepherding will be available.

# **Important dates**

Submissions: January 20, 2020 (anywhere in the world) Notifications: February 10, 2020 Pre-workshop versions: March 2, 2020 PX/20: March 23 or 24, 2020 Final versions: April 16, 2020

# Publication

Papers and essays accepted through peer review will be published as part of ACM's Digital Library; video publication on Vimeo or other streaming site; other publication on the PX workshop website.

# 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