# **Programming Experience 2021 Workshop**



March 23 (Tue), 2021 Co-located with <Programming> 2021 in Cambridge, UK https://2021.programming-conference.org/home/px-2021/ http://programming-experience.org/px21/

#### **Abstract**

Some programming feels fun, other programming feels annoying. Why?

For a while now the study of programming has forced improvements to be described through the Fordist lens of usability and productivity, where the thing that matters is how much software can get built, how guickly.

But along the way, something has gone missing. What makes programmers feel the way they do when they're programming? It's not usually fun to spend an age doing something that could have been done easily, so efficiency and usability still matter, but they're not the end of the story.

Some environments, activities, contexts, languages, infrastructures make programming feel alive, others feel like working in a bureaucracy. This is not purely technologically determined, writing Lisp to do your taxes probably still isn't fun, but it's also not technologically neutral, writing XML to produce performance art is still likely to be <br/>
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Whilst we can probably mostly agree about what isn't fun, what is remains more personal and without a space within the academy to describe it.

In its past editions, PX set its focus on questions like: Do programmers 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?

In this 7th edition of PX, we will expand its focus to also cover the experience that programmers have. What makes it and what breaks it? For whom? What can we build to share the joy of programming with others?

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; and 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. We also welcome a wide spectrum of contributions on programming experience.

#### Submissions

Submissions are solicited for Programming Experience 2021 (PX/21). 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 are expected to be between 20 minutes and one hour (if time allows), depending on quality, form, and relevance to the workshop.

Submissions of academic papers directed toward publication should be so marked, and the program committee will engage in peer review for all such papers.

All artifacts are to be submitted via EasyChair (https://easychair.org/conferences/?conf=px21). 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: February 14, 2021 (anywhere in the world)

Notifications: February 28, 2021

Pre-workshop versions: March 16, 2021

**PX/21: March 23, 2021** Final versions: April 9, 2021

## 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. Authors of accepted contributions will be invited to present their work at the workshop.

## **Organizers**

Luke Church, University of Cambridge, United Kingdom and Lund University, Sweden 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