# Next-level Creative Coding with Shader Programming

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**Principal Investigator:** Dr. Mike Kin-Ming WONG

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**Abstract:**

"Creative coding is an artistic practice introduced in the early 2000s and made ubiquitous by a Java-based programming framework named Processing. This unique coding platform is now the de-facto standard of creative coding education for artists and students from a relatively less technical background.

However, being a single-threaded coding language, the basic drawing functions of Processing does not allow users to take full advantage of the multi-core CPU and GPU commonly available in most modern hardware. The inability to take advantage of these resources often results in artworks that make sub-optimal use of computer hardware and perform sluggishly in terms of interactivity.