### GA2013 - XVI Generative Art Conference

### Renick Bell



Topic: Music

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### References:

http://www.youtube.com/ watch?v=1hsklYnal o [2] https://soundcloud.com/r enick/renick-bell-livecoding-at [3] R. Bell, "An Approach to Live Algorithmic Composition using Conductive," in Proceedings of LAC 2013, 2013. [4] R. Bell, "Towards **Useful Aesthetic Evaluations of Live** Coding," in Proceedings of the International Computer Music Conference, 2013. [5] J. Dewey, Art as Experience. Perigee Trade, 2005.

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# Live Performance: IMPROVISATION

#### Abstract:

Using a custom live coding system on a laptop, between 15 minutes and one hour (according to the organizer's scheduling of the concert) of improvised programming generates percussive music played through a sound system with ample bass. That coding is projected on the largest possible screen. The improvisation flows through distinct sections and employs thousands of audio samples. It emphasizes generative rhythms and variation of event density. For some examples, see [1,2].

A library called Conductive [3], written by Bell to solve the problem of time-constraints in live coding, triggers a software sampler. In the performance, that and other prepared code is loaded into an editor and edited. New code is entered, and code is sent to an interpreter to be run. Doing so, Bell manages multiple concurrent processes that spawn events, including the number of processes, the type of events those processes spawn, and other parameters.

A live coding performance consists of a network of potential percepts like rhythms, timbres, event density, rate of change, programming libraries, projection contents, and performance space. Software abstractions can be directly perceived or indirectly felt through their influence on other percepts. Chief among these abstractions are those which represent generative processes. Audiences are made aware of the generative processes, their representations in code, and their output. Encountering this set of percepts makes an art experience, as described by John Dewey [4,5].



Bell doing a live coding performance in Graz, Austria in May 2013.

## Keywords:

live coding, algorithmic composition, generated rhythms, algorave