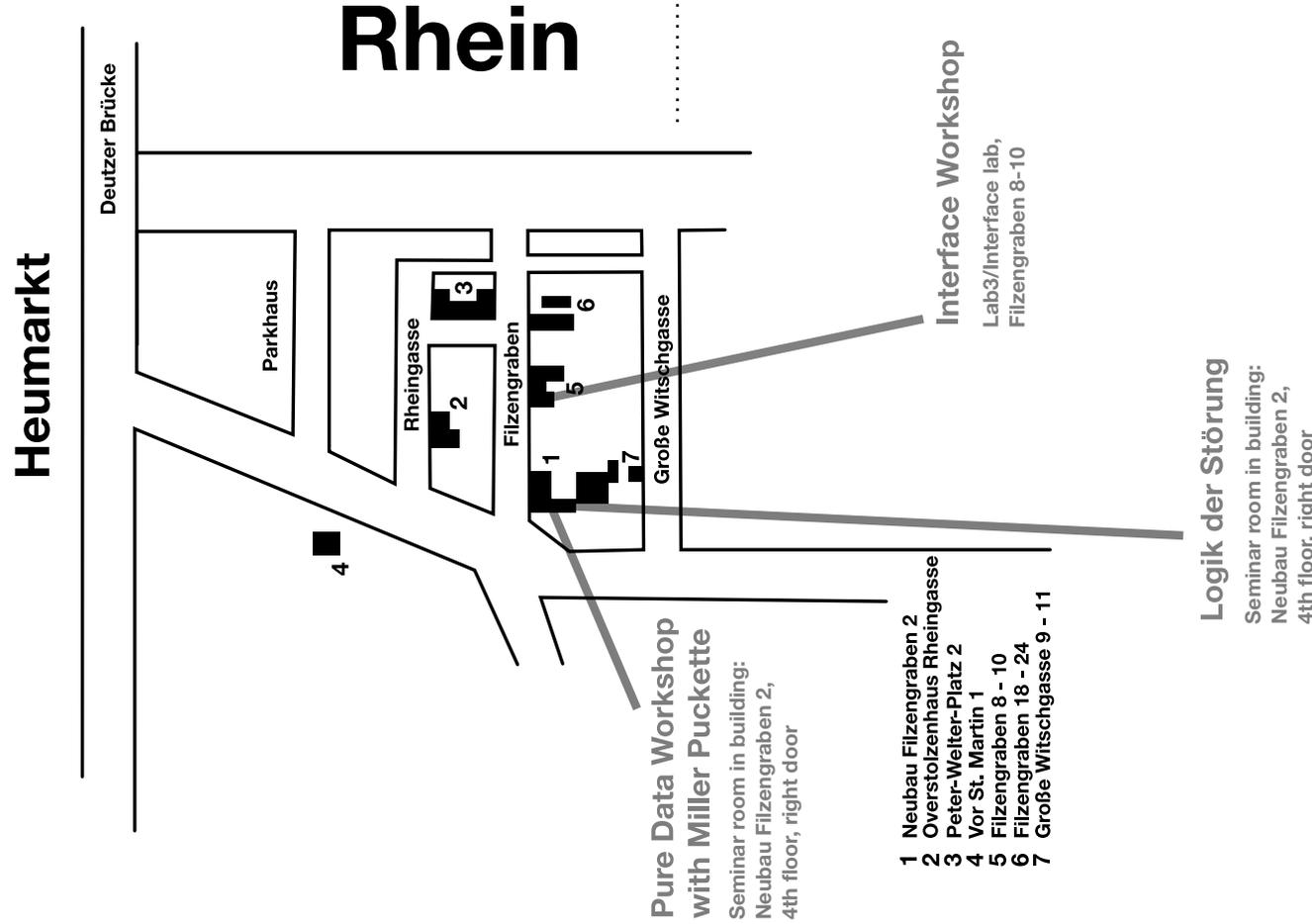


Puckette joined the Music department of the University of California, San Diego in 1994, and is now Associate Director of the Center for Research in Computing and the Arts (CRCA). He is currently working on a new real-time software system for live musical and multimedia performances called Pure Data (*Pd*), in collaboration with many other artists/researchers/programmers worldwide. Pd is free and runs on Linux, Macintosh, and Windows systems. In 1997 Puckette joined the Global Visual Music project. Since 2004 he has performed with the Convolution Brothers.



# Linux Audio Conference

Lectures / Exhibition / Concerts / Clubnight

Köln, 28.2.-2.3.2008

Kunsthochschule für Medien Köln. Filzengraben 2, 50676 Köln

# Workshops

For the 6th Linux Audio Conference at the Academy of Media Arts Cologne, we are delighted to welcome the inventor of Pd as the keynote speaker: Miller Puckette. His software has attracted a huge community of active users. musicians as well as visual or performance artists. much like its commercial counterpart Max/MSP, which also originates from Puckette.s work. At LAC2008, a workshop held by Miller Puckette is a perfect opportunity to gain first-hand insights into the theory and technique of Pd.

Further workshop topics this year include the textual sound synthesis language SuperCollider and an Arduino compatible, open hardware DIY microcontroller board developed at Lab3 of our academy.

While preparing the programme for 2008, an interesting trend became visible: Whereas earlier LACs had a lot of papers on technical topics, this year many users (i.e. non-developers) of Linux audio software submitted texts and presentations. They describe how open source audio software enables them to explore new compositional ideas and styles, how Linux can be used to build large scale installations or to drive hardware outside of a standard computer.

## Interface Workshop

*Jonas Hieischer, Echo Ho, Andreas Muxel, Martin Nawrath, Lasse Scherffig*

Thu 28 Feb 2008  
14:30 - 17:30

Lab3/Interface lab, Filzengraben 8 - 10

Participants of the workshop will assemble an open hardware microcontroller board, which has been developed at Lab3 of KHM (Academy of Media Arts Cologne). As the board is fully compatible with Arduino, the Arduino open source software will be used for programming. Examples for interfacing the board to several software environments (Pure Data, Blender, Processing) are introduced. For the hardware a fee of 15 Euro will be charged. Users are encouraged to bring their own laptop. It should have a serial interface (RS-232 standard). Optionally, we will have some USB to serial converters for sale (10 EUR).

## Logik der Störung

A workshop on distributed stochastic composition and synthesis

*Sergio Luque, Julian Rohrhuber*

Thu 28 Feb 2008  
14:30 - 17:30

**Seminar room in building:  
Neubau Filzengraben 2, 4th floor, right door**

New ways to bring back the noise into the telephone line. Instead of separating signal and noise, we will try to devise new and beautiful uncertainties, reconstruct re-spected old noise sources and play with the intractable. This workshop will be an experimental laboratory for finding and exchanging stochastic algorithms that run on each other's computers in the local network. We will give a brief introduction to the programming language SuperCollider, and continue into networked live coding of noise music. Please bring a laptop.

## Pure Data Workshop with Miller Puckette

Pitch-synchronous and Waveshaping Algorithms for Processing Guitar Strings Individually

Fri 29 Feb 2008  
14:30 - 17:30

**Seminar room in building:  
Neubau Filzengraben 2, 4th floor, right door**

Some new algorithms are explained and demonstrated for processing guitar sounds using a separated pickup so that strings can be processed individually. It's theoretically possible to substitute the string's waveform with any other, possibly time-varying one, and/or to change the octave, among many other cool effects.

Note: This workshop is not a Pure Data introduction. Participants should be familiar with Pd in advance

## Biographical note

Miller Puckette obtained a B.S. in Mathematics from MIT (1980) and Ph. D. in Mathematics from Harvard (1986). He was a member of MIT's Media Lab from its inception until 1987, and then a researcher at IRCAM (l'institut de Recherche et de Coordination Musiqu/Acoustique, founded by composer and conductor Pierre Boulez). There he wrote the Max program for Macintosh computers, which was first distributed commercially by Opcode Systems in 1990 and is now available from Cycling74.com. In 1989 Puckette joined IRCAM's 'musical workstation' team and put together an enhanced version of Max, called Max/FT5, for the ISPV system, which was commercialized by Ariel, Inc. This system became a widely used platform in computer music research and production facilities. The IRCAM real-time development team has since reimplemented and extended this software under the name jMax, which is distributed free with source code.