

Juan Vuletich

Personal information:

I'm 41 years old. I live in Buenos Aires, Argentina with my wife and two daughters (ages 9 and 5). My main interests are programming, graphics and signal processing. Please see <http://www.jvuletich.org/aboutMe.html>. My email address is juan@jvuletich.org.

Education & Academics:

M.Sc. in Computer Science

From the University of Buenos Aires, with honors (Gold Medal). GPA 9.78 / 10.0, 2005.

"New Bases for Music Processing in the Time-Frequency Plane"

Wavelets X, SPIE annual conference, 2003. San Diego, USA.

"Stable Bases for Music the Time-Frequency Plane"

International Congress on Harmonic Analysis and Applications, 2006. Merlo, San Luis, Argentina.
Coauthored with Dr. Ana Ruedin

"Researcher" at University of Buenos Aires

Project "Wavelets and Neural Networks: integrated approaches and applications" (UBACyT X166 Scientific Program 2004-2007), Dept. of Computer Science, UBA.

Thesis reviewer "Toward a Scientific Taxonomy of Musical Styles"

Héctor Bellmann's Masters Thesis at Queensland University of Technology, 2006. Australia.

"Cuis" and "Morphic 3"

Talks at Smalltalks 2007 and Smalltalks 2009 conferences.

"Music Processing" and "Object Databases"

Invited talks for courses at University of Buenos Aires and University of Palermo (Argentina).

Specialization in Signal & Image Processing and Graphics:

Morphic 3

Vector rendering engine with a new level of anti-aliasing quality <http://www.jvuletich.org/Morphic3/Morphic3-201006.html> . Based on novel techniques I am developing.

Non linear spatial deformation and resampling of images without artifacts <http://www.jvuletich.org/Morphic3/Morphic3-200911.html> (based on recent papers by others).

Music Synth

New music synthesizer for Squeak, with Moog (resonant) and smooth filters controlled by envelopes, emulation of orchestral string sounds. (2001)

Time - Frequency representations of audio

For better DSP (M.Sc. thesis, talks at several conferences, see <http://www.jvuletich.org/research.html>).

PhotoSqueak

Image Processing lab for Squeak. <http://www.jvuletich.org/Squeak/PhotoSqueak/PhotoSqueak1/ImageProcessingEng.html> (2000)

Real time music synth & sampler

Real time music synthesizer in 6809 assembly language. Supporting 4 voices, many instruments, envelopes, and time varying timbres.(1987, at age 16)

Programming skills:

- Smalltalk: 15 years of experience. Lead of Cuis Smalltalk project: <http://www.jvuletich.org/Cuis/Index.html>
- C: 4 years of experience
- Intel & Motorola Assembly Language: 4 years of experience
- Java: 1 year of experience

Other skills:

- English. Excelent reading and writing skills. Good conversation skills.
- Music theory, acoustics of musical instruments, psycho- acoustics, techniques for recording and production of music.

Work experience:

Satellogic

Software for processing and evaluation of aerophotography and satellite images. (2011 - current)

Software Generation

Word processing application based on text styles (done in Cuis) (2009 - 2012)

CytecSystems, LLC

Software for an embedded networked video and media player for on-site advertising and education (done in Cuis) (2008 - 2011)

Caesar Petroleum Systems, LLC

Simulator of oil projects for big oil companies, done in Visual Smalltalk (2002 - 2008)

Telecom Argentina

Network Inventory. Very big Gemstone database, modeling the whole communications network of a country-wide telco. (2001 - 2002)

Walt Disney Imagineering

Internship with Alan Kay's Squeak group. New music synth for Squeak Smalltalk. (2000 - 2001)

Mercap Software

Trading application for the financial sector. VisualAge Smalltalk (1999 - 2000)

IBM Argentina

Administrative software for Prudential insurance (1998 - 1999)