Quim Llimona

http://lemonzi.me/contact

Interests

Machine Perception and Intelligence, Music, Acoustics, Photography.

Professional Experience Google, Zürich, Switzerland

Software Engineer

September 2017 – Present

Voctro Labs, Barcelona, Spain

Software Engineer

January 2017 - July 2017

Consultancy work in Deep Learning.

McGill University, Montréal, Canada

Research and Teaching Assistant

April 2014 - August 2017

TA for the Fall 2016 MUMT306 course (Music and Audio Computing I).

Research on violin acoustics at the Computational Acoustics Modeling Laboratory (CAML).

Google Research, Mountain View, California, USA

Software Engineering Intern

May 2016 - September 2016

Developed novel audio analysis methods with the Machine Perception team.

Telefónica Digital, Barcelona, Spain

Research Engineer (Speech Recognition, Intern)

November 2014 – May 2015

Worked on Automatic Speech Recognition using the Kaldi toolkit and DNN.

Universitat Pompeu Fabra, Music Technology Group, Barcelona, Spain

Research Assistant / Developer

March 2012 – July 2014

Developed part of the *repovizz* web platform with the SIEMPRE team.

Lawrence Berkeley National Laboratory, Berkeley, California, USA

Software Developer (Intern)

July 2013 - September 2013

Developed real-time web interfaces within the Advanced Technologies Group.

EDUCATION

McGill University, Montréal, Canada

M.A. in Music Technology

September 2015 - Present

Universitat Autònoma de Barcelona, Barcelona, Spain

M.Sc. in Modeling for Science and Engineering

September 2014 - July 2015

Universitat Pompeu Fabra, Barcelona, Spain

B.Sc. in Audiovisual Systems Engineering

September 2010 - July 2014

Escola Superior de Música de Catalunya (ESMUC), Barcelona, Spain

B.A. in Music, Sonology Major

September 2009 - December 2014

Summer courses

- Multimedia Information and Signal Processing, Aalborg University, Denmark (2012)
- Erasmus Intensive Program on Electronic Music, Cosenza Conservatory, Italy (2011)

SKILLS

- Abilities: Machine Learning, Digital Signal Processing (DSP), Music.
- Languages and Tools: Python, C/C++, JavaScript, MATLAB, TensorFlow, UNIX, Git.

Publications

- Q. Llimona, C. Saitis, et al., Exploring Simulation-Based Playability Metrics of 9 Perceptually Evaluated Violins, in Proc. of the Int. Symp. on Musical Acoustics (ISMA), 2017.
- E. Maestre, P. Papiotis, et al., Enriched Multimodal Representations of Music Performances: Online Access and Visualization, IEEE Multimedia Magazine, Vol. 24, No. 1, pp. 24-34, 2017.
- C. Serrano, L. R. Doolittle, et al., End-to-end FEL Beam Stability Simulation Engine, in Proc. of the 7th Int. Particle Accelerator Conf. 2016.
- E. Maestre, C. Spa, et al., Playability of a bowed string physical model including finite-width thermal friction and hair dynamics, Journal of the Acoustical Society of America, 138 (3), 1887-1887, 2015.
- Q. Llimona, Playability study of a bowed string physical model including finite-width thermal friction and hair dynamics, Master Thesis, Universitat Autnoma de Barcelona, Spain, 2015.
- Q. Llimona, J. Luque, et al., Effect of gender and call duration on customer satisfaction in call center big data, in Proc. of Interspeech, 2015.
- Q. Llimona, O. Mayor, et al., Repovizz Multimodal Online Database and Visualization Tool, in 1st Web Audio Conference, 2015.
- Q. Llimona, Bowing the violin: A case study for auditory-motor pattern modelling in the context of music performance, Undergraduate Thesis, Universitat Pompeu Fabra, Spain, 2014.
- E. Berdahl and Q. Llimona, *Tangible embedded Linux*, in Proc. of the 7th Int. Conf. on Tangible, Embedded and Embodied Interaction, 2013.
- E. Guaus, O. Saña, and Q. Llimona, Observed differences in rhythm between performances of classical and jazz violin students, in Sound and Music Computing Conf. 2013.
- O. Mayor, Q. Llimona, et al., repovizz: a framework for remote storage, browsing, annotation, and exchange of multi-modal data, in Proc. of the 21st ACM Int. Conf. on Multimedia, 2013.
- C. Serrano, J. Byrd, et al., New generation of LLRF and beam-based feedback stability models, in LLRF13 Workshop, 2013.

Awards

- WearHacks Montréal 2015, Best Use of Myo and of the Nuance NLU API.
- Schulich Scholar Fellowship, 2015-2017.
- UPF Graduation Special Award (best student), 2014.
- WIPJam Hackathon 2014, Best in Show at the Mobile World Congress.
- International Collegiate Programming Contest 2011, SWERC Regionals, Special Mention.
- Multiple awards for the Theremidi, a robotic theremin player with MIDI interface, 2009.
- National Math Contest (Cangur), top 100 over 4k, 2008.
- National Writing Contest (COBEGA), 7th position, 2005.

LEADERSHIP AND VOLUNTEERING

- Workshop co-instructor and speaker at the FADE Festival 2014, La Cellera de Ter, Spain.
- Technical supervisor and co-organizer of the Barcelona Fiddle Congress 2013.
- Jury member at the Exporecerca Youth Research Fair 2013 and 2014, Barcelona, Spain.
- Workshop co-instructor at the TEI Conference 2013, Barcelona, Spain.
- Main technician at the Symposium on Music Pedagogy 2012, ESMUC, Barcelona, Spain.
- Instructor of the Laptop Orchestra Workshop at the PDCON 2011, Weimar, Germany.
- Staff at the Sound and Music Computing Conference 2010, Barcelona, Spain.
- Barcelona Laptop Orchestra core member, 2009-2012.
- Violinist at the Jove Orquestra Nacional de Catalunya (JONC), 2009-2011, Barcelona, Spain.