

GUILLEM CORTÈS SEBASTIÀ

Sabadell, 9th of May, 1995

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08/2020 - **BMAT & Music Technology Group MTG @UPF**, Barcelona
Research Engineer (PhD candidate)
Working on Audio Fingerprinting within the [NextCore](#) project



07/2020 - **School of Informatics | University of Edinburgh**, Edinburgh
01/2020 **Research Assistant**
Working with [Barry Haddow](#) studying the robustness of end-to-end speech translation systems. [Thesis link](#). Tools: Python, PyTorch, Git, bash



01/2020 - **BMAT Music Licensing S.L.**, Barcelona
03/2018 **Charts Software Developer**
Developing the BMAT's Charts web app. Tools: Python, Django, SQL, docker, Git, bash, html, css, JS



02/2018 - **Telefónica I+D**, Barcelona
05/2017 **Research Assistant**
Working with [Jordi Luque](#) developing a biometric authentication system based on PPG signal by using CNNs and embedding it into a prototype. Further information in my [thesis](#).
Tools: Python, Keras, Tensorflow, data science toolkits, bash



09/2015 - **GCEM Laboratory | UPC**, Barcelona
09/2014 **Laboratory Technician**
Certifying electronic devices according to the standards and legislation. Tools: LabView



2022 **ISMIR 2022**, Bengaluru
"BAF: An Audio Fingerprinting Dataset for Broadcast Monitoring" [paper](#)



2018 **EUSIPCO 2018**, Rome
"End-to-end Photoplethysmography (PPG) Based Biometric Authentication by Using Convolutional Neural Networks" [paper](#)



2018 **Abbey Road Hackathon 2018**, London
Chirp challenge winner [article](#)



09/2020 - **Universitat Politècnica de Catalunya**, Barcelona
09/2018 **Master's in Advanced Telecommunication Technologies (Deep Learning for Multimedia Processing)**



07/2018 - **Telecommunications Technologies and Services Engineering (major in Audiovisual Systems)**
09/2013

09/2019 - **Escola de Música Creu Alta**, Sabadell
09/2007 **Professional Grade in Classical Guitar**



English 100 TOEFL (C2 equivalent)
Catalan Native
Spanish Native



Voluntary work

2016

With the *Menos Cabeza Más Corazón* Team I have carried out three voluntary works that have taken me to live and enjoy the most extreme sport competitions over the world. In all of these races, we were under huge pressure since at the end of the day, we had to have all necessary images recorded (with its back up) and the video resume of each stage uploaded to *Youtube*.

- Ultra Sierra Nevada 2016: [SOY MONTAÑA | Valentí Sanjuan](#)
- Powerade MTB series non-stop Madrid-Lisboa 2016: [MADRID LISBOA 2016 | Valentí Sanjuan](#)
- Titan Tropic Cuba by GAES 2016

2020

Voluntariat per la Llengua, a program to help Catalan learners practice the language through conversation.



Other interests

I play the guitar since I was 11 and I'm just starting to produce my own music. I also do sport regularly; I really love jogging in the woods, already ran 3 marathons and counting! I think it is the perfect way to find inspiration, take a deep breath and inspire pure air. Lover of music and photography since I can remember. I like new technologies and everything related to its future upcoming, obviously.



About me

I love music, I really do. I've been playing the guitar and studying music for 14 years now and I always thank that 11 years old kid, for making the decision to start learning how to play the classical guitar. On the other hand, I've studied Telecommunications engineering and I'm about to finish a Master's in Artificial Intelligence, so some could say I have an artistic-scientific mind. Hope this means that I have the best of both worlds.

Even though I really like computers and signals, I always knew that my passion is music. So, let's imagine for a moment the day I was in a Signal Processing lecture, and the concept of *Octave* appeared. Immediately after that, I automatically pictured a Venn diagram of Passion (music) and Profession (telecom. engineer) and in the middle of the intersection, my future.

I find it worth mentioning that when I had to choose which master's to do, I had a big dilemma. I had to choose between the Master in Sound and Music Computing and the MATT. I chose the latter because I felt that it was better to study the application of AI in all kinds of signals and I thought that I could always specialize in a specific area later on.

During my time in Edinburgh working on my MSc Thesis: *Towards Robust End-to-End Speech Translation*, co-supervised by [Marta Ruiz Costa-Jussà](#) and [Barry Haddow](#) I (Covid-19 Pandemic apart) was studying how to make end-to-end speech translation more robust when I attended my first ICASSP, virtually of course. I remember that year there were a lot of papers about speech translation, so it was perfect timing. However, there was also a track dedicated to MIR papers and I found myself constantly checking the related Slack channels even more than the Speech Translation ones. In that moment I knew I had to go for it, so I left the [MT-UPC](#) group and got accepted to an industrial PhD program between the MTG and BMAT. And that's how I ended up in the marvelous world of MIR.