



Ignasi Solé Piñas <ignasicellista@gmail.com>

Fw: PhD question about Deezer and MIR

2 messages

Ignasi Sole <I.Sole@stjamesprep.org.uk>
To: Ignasi Solé Piñas <ignasicellista@gmail.com>

27 August 2022 at 09:42

Ignasi Sole
Head of Music

Earsby Street, London W14 8SH
Tel: 020 7348 1794

www.stjamesprep.org.uk



St James Schools are part of the Independent Educational Association Limited. The IEAL is a private company limited by guarantee registered in England and Wales with company number 01222329. IEAL's registered office is at St James Schools, Earsby Street, London W14 8SH. The IEAL is a registered charity (number 270156) and is regulated by the Charity Commission.

From: romain hennequin <romain_hennequin@yahoo.fr>

Sent: 28 March 2022 08:36

To: Ignasi Sole <I.Sole@stjamesprep.org.uk>

Subject: Re: PhD question about Deezer and MIR

Dear Ignasi,

as already mentioned in my first email, this is tricky to answer such a question. The more the data, the better the system at the end of training, but the amount is not the only matter: diversity of the dataset is also very important. If you'd like your system to generalize a bit, you'd better gather a few hours of recordings by different artists, with different playing styles... than 100h of very similar music.

So my best recommendation would be to try to gather as much as you can without much effort (I think at least a few hours of materials would be needed for fully supervised training, it may be less if you use transfer learning method, or few-shot learning methods, but it will be probably longer to set up and this is not something that the spleeter package makes it possible to do), do a first round of training and iterate if needed.

Hope it helps,

Best,

Romain

Le dimanche 27 mars 2022, 20:38:22 UTC+2, Ignasi Sole <i.sole@stjamesprep.org.uk> a écrit :

Dear Romain,

Apologies for my poorly worded question. It would be the “number of hours of audio signal to build the training dataset?”

All the best,

Ignasi Sole

Head of Music

Earsby Street, London W14 8SH
Tel: 020 7348 1794

www.stjamesprep.org.uk



St James Schools are part of the Independent Educational Association Limited. The IEAL is a private company limited by guarantee registered in England and Wales with company number 01222329. IEAL's registered office is at St James Schools, Earsby Street, London W14 8SH. The IEAL is a registered charity (number 270156) and is regulated by the Charity Commission.



Falcons Pre-Preparatory School for Boys is part of the Alpha Plus Group Ltd.

This e-mail is intended only for the person to whom it is addressed. If an addressing or transmission error has misdirected this e-mail, please notify the author by replying to this e-mail.

If you are not the intended recipient you must not use, disclose, print or rely on this e-mail. This email has been scanned for all known viruses and whilst we have taken every reasonable precaution to minimise risk, we cannot accept liability for any damage which you sustain as a result of software viruses. You should carry out your own virus checks before opening any attachments to this e-mail. Any views or opinions presented are solely those of the author and do not necessarily represent those of Alpha Plus Group. Whether you are the sender or the recipient, this email may be monitored, recorded and retained. You have a responsibility to ensure laws are not broken when composing or forwarding emails and their contents.

Alpha Plus Group is a limited company, registration number 438111 England & Wales, Registered Office: 50 Queen Anne Street, London, W1G 8HJ.

Ignasi Sole
Head of Music
Earsby Street, London W14 8SH
Tel: 0207 348 1777

Pupils' academic achievement and personal development rated Excellent
Independent Schools Inspectorate [Read report](#)

"Parents love the school and children love it more."
Good Schools Guide [read full review](#)

www.stjamesprep.org.uk



St James Schools are part of the Independent Educational Association Limited. The IEAL is a private company limited by guarantee registered in England and Wales with company number 01222329. IEAL's registered office is at St James Schools, Earsby Street, London W14 8SH. The IEAL is a registered charity (number 270156) and is regulated by the Charity Commission.

From: romain_hennequin@yahoo.fr

Sent: 27 March 2022 19:12

To: Ignasi Sole

Subject: Re: RE: PhD question about Deezer and MIR

Dear Ignasi,

I'm not sure I get your question. Are you talking about the number of hours of audio signal to build the training dataset, the required time for training, or the time it would take to prepare the training?

Best,

Romain

samedi, 26 mars 2022, 10:08AM +01:00 de Ignasi Sole I.Sole@stjamesprep.org.uk:

Dear Romain,

Thank you so much for your answer, for the record for my Ph.D.

How many hours do you think I would need? A Ph.D student in electrical engineering will help train a Spleeter version for this purpose.

If you could provide with an estimate it would be of enormous value.

All the best,

Ignasi Sole

Head of Music

Earsby Street, London W14 8SH


Tel: 020 7348 1794

www.stjamesprep.org.uk



St James Schools are part of the Independent Educational Association Limited. The IEAL is a private company limited by guarantee registered in England and Wales with company number 01222329. IEAL's registered office is at St James Schools, Earsby Street, London W14 8SH. The IEAL is a registered charity (number 270156) and is regulated by the Charity Commission.



 12898-Falcons Pre-Preparatory School for Boys - Mini Falcons Marketing Collateral - Email Signature Banner V2 - 150dpi

Falcons Pre-Preparatory School for Boys is part of the Alpha Plus Group Ltd.

This e-mail is intended only for the person to whom it is addressed. If an addressing or transmission error has misdirected this e-mail, please notify the author by replying to this e-mail.

If you are not the intended recipient you must not use, disclose, print or rely on this e-mail. This email has been scanned for all known viruses and whilst we have taken every reasonable precaution to minimise risk, we cannot accept liability for any damage which you sustain as a result of software viruses. You should carry out your own virus checks before opening any attachments to this e-mail. Any views or opinions presented are solely those of the author and do not necessarily represent those of Alpha Plus Group. Whether you are the sender or the recipient, this email may be monitored, recorded and retained. You have a responsibility to ensure laws are not broken when composing or forwarding emails and their contents.

Alpha Plus Group is a limited company, registration number 438111 England & Wales. Registered Office: [50 Queen Anne Street, London. W1G 8HJ](#).

Ignasi Sole

Head of Music

Earsby Street, London W14 8SH
Tel: 0207 348 1777

Pupils' academic achievement and personal development rated ExcellentIndependent Schools Inspectorate [Read report](#)*“Parents love the school and children love it more.”*Good Schools Guide [read full review](#)www.stjamesprep.org.uk

St James Schools are part of the Independent Educational Association Limited. The IEAL is a private company limited by guarantee registered in England and Wales with company number 01222329. IEAL's registered office is at St James Schools, Earsby Street, London W14 8SH. The IEAL is a registered charity (number 270156) and is regulated by the Charity Commission.

From: [romain hennequin](#)**Sent:** 22 March 2022 10:00**To:** [Ignasi Sole](#)**Subject:** Re: PhD question about Deezer and MIR

Dear Ignasi,

Thank you for your message.

This should be feasible to get a better separation between cello and piano than what pretrained spleeter models are able to do but it would need retraining on this specific application and then you'll need data for this i.e. isolated piano and cello tracks for the music you're interested in. It may not work perfectly though (Piano and Cello are both producing sounds through vibrating strings so it is not an easy problem). Regarding the amount of data, it is rather hard to say what would be required: you need a decent amount of data and also data that are representative of the signal you'll be applying your system afterward (for instance, if you only have very dry cello/piano sounds for training, don't expect the model to properly handle reverberation on your tests signal).

Cheer,

Romain

Le lundi 21 mars 2022, 21:18:46 UTC+1, Ignasi Sole <i.sole@stjamesprep.org.uk> a écrit :

Dear Romain,

My name is Ignasi, and I am a 2nd year Ph.D student at the University of Aberdeen.

My thesis is about the evolution of the performance of Beethoven cello sonatas, and because it is a polyphonic piece, I find it hard to extract key elements such as vibrato and portamento, and software such as AVA or Sonic Visualizer, are limited to monodic recordings, thus I can only extract such things when the cello is playing solo, which is rare.

I stumbled upon Music Source Separation not long ago, and after a lot of reading it came apparent that nothing has been built or trained yet that can identify and extract the cello from the piano part and vice-versa, I tried Spleeter/Deezer and the outcome is that Piano is extracted as piano but the cello is extracted as unknown. The audio result is that the cello muffles within the piano and vice versa, like if the piano was melting inside the cello and the cello inside the piano being non identifiable and extractable.

My question to you is, is it feasible to achieve such result in which the Cello part is isolated and extracted from the piano, without losing any expression such as vibrato, shifting's, portamento, dynamics and etc? What would I need to achieve this? And furthermore, if I were to send you the materials to train your machine, how many samples and data would you need?

The answer to this questions could prove crucial for my Ph.D so I will be waiting your response,

All the best,

Ignasi Sole

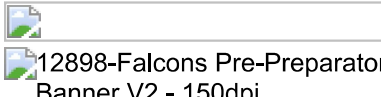
Head of Music

Earsby Street, London W14 8SH
Tel: 020 7348 1794

www.stjamesprep.org.uk



St James Schools are part of the Independent Educational Association Limited. The IEAL is a private company limited by guarantee registered in England and Wales with company number 01222329. IEAL's registered office is at St James Schools, Earsby Street, London W14 8SH. The IEAL is a registered charity (number 270156) and is regulated by the Charity Commission.



12898-Falcons Pre-Preparatory School for Boys - Mini Falcons Marketing Collateral - Email Signature Banner V2 - 150dpi

Falcons Pre-Preparatory School for Boys is part of the Alpha Plus Group Ltd.

This e-mail is intended only for the person to whom it is addressed. If an addressing or transmission error has misdirected this e-mail, please notify the author by replying to this e-mail.

If you are not the intended recipient you must not use, disclose, print or rely on this e-mail. This email has been scanned for all known viruses and whilst we have taken every reasonable precaution to minimise risk, we cannot accept liability for any damage which you sustain as a result of software viruses. You should carry out your own virus checks before opening any attachments to this e-mail. Any views or opinions presented are solely those of the author and do not necessarily represent those of Alpha Plus Group. Whether you are the sender or the recipient, this email may be monitored, recorded and retained. You have a responsibility to ensure laws are not broken when composing or forwarding emails and their contents.

Alpha Plus Group is a limited company, registration number 438111 England & Wales. Registered Office: [50 Queen Anne Street, London. W1G 8HJ](#).

Ignasi Sole

Head of Music

Earsby Street, London W14 8SH
Tel: 0207 348 1777

Pupils' academic achievement and personal development rated Excellent
Independent Schools Inspectorate [Read report](#)

“Parents love the school and children love it more.”
Good Schools Guide [read full review](#)

www.stjamesprep.org.uk



St James Schools are part of the Independent Educational Association Limited. The IEAL is a private company limited by guarantee registered in England and Wales with company number 01222329. IEAL's registered office is at St James Schools, Earsby Street, London W14 8SH. The IEAL is a registered charity (number 270156) and is regulated by the Charity Commission.

Ignasi Sole <I.Sole@stjamesprep.org.uk>
To: Ignasi Solé Piñas <ignasicellista@gmail.com>

27 August 2022 at 09:42

Ignasi Sole
Head of Music

Earsby Street, London W14 8SH
Tel: 020 7348 1794

www.stjamesprep.org.uk



St James Schools are part of the Independent Educational Association Limited. The IEAL is a private company limited by guarantee registered in England and Wales with company number 01222329. IEAL's registered office is at St James Schools, Earsby Street, London W14 8SH. The IEAL is a registered charity (number 270156) and is regulated by the Charity Commission.

From: romain hennequin <romain_hennequin@yahoo.fr>

Sent: 22 March 2022 10:01

To: Ignasi Sole <I.Sole@stjamesprep.org.uk>

Subject: Re: PhD question about Deezer and MIR

Dear Ignasi,

[Quoted text hidden]

[Quoted text hidden]