Darius AFCHAR
RESEARCH SCIENTIST AT DEEZER

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Born in 1995 in Toulouse, **France**

EDUCATION

2018 - 2019 **Master's Degree: MVA** - *Mathematics, Vision, Learning* - at ***ENS Paris-Saclay***
Prestigious French master on Machine Learning. *Theory and research oriented.*

2015 - 2019 **Master of Engineering in Computer Science** - at ***École Nationale des Ponts et Chaussées***
- *General courses + Traditional AI (e.g., trees, boosting, regressions, perceptrons)*

2013 - 2015 ***Lycée Saint-Louis* (Paris)** - Intensive two-year preparatory courses (mathematics & physics) for the competitive entrance exams to the leading french engineering Grandes Écoles

RESEARCH PUBLICATIONS

sep 2023 **Of Spiky SVDs and Music Recommendation** - *ACM RecSys 2023*
Best short paper runner-up

dec 2022 **Learning Unsupervised Hierarchies of Audio Concepts** - *ISMIR 2022*

jun 2022 **Explainability in Music Recommender Systems** - *AI Magazine 43:2*

jul 2021 **Towards Rigorous Interpretations: a Formalisation of Feature Attribution** - *ICML 2021*

sep 2020 **Making Neural Networks Interpretable with Attribution** - *ACM RecSys 2020*

sep 2018 **Mesonet: a Compact Facial Video Forgery Detection Network** - *WIFS 2018*
Unexpected but has more than 1000 citations. I am kinda famous.

RELEVANT EXPERIENCES

present
nov 2019 **PhD, Research scientist -** in the **Research team** at **Deezer (Paris)**
Research topic: "Interpretable Music Recommender Systems"

oct 2019
apr 2019 **Research internship -** in the **Recommendation team** at **Deezer (Paris)**
- *Tensorflow, Keras, Python, Spark, Scala, Git*

aug 2018
mar 2018 **Research internship -** at **National Institute of Informatics (Tokyo)**
First team to provide a method to detect falsified videos forged via deep learning (*deepfakes*).

feb 2018
jun 2017 **Internship - Fullstack developer -** at **BAM (Paris)**
Five projects of cross-platform mobile app with Lean/Scrum approaches
- *Javascript, React-Native, Redux, Mobx, Node, Docker, SQL, Git, ...*

2011 - 2014 **Association - Developer / Designer / Musician -** at **Radio VNL (Toulouse)**
Radio Vinyle was an independant music station broadcasted on the Web
- *Association sector / HTML5, jQuery, PHP, Cocoa-Applescript*

COMPUTING

Started with C++ in 2006

Best-known languages
Python / C++ / Javascript /
Lua / PHP / ...

LANGUAGES

French - Native
English - *TOEIC, TOEFL, GRE*

Experience in German and Spanish but I don't practice enough.

INTERESTS

Music: playing piano since 2005
Certificate in classical music
Funk/Soul band

Linoprinting / Climbing