

# Gabriel P. Oliveira

*Data Scientist and Researcher*

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## Education

- 2021–Present **Ph.D. in Computer Science**, *Universidade Federal de Minas Gerais*, Brazil.  
**Advisor:** Prof. Mirella M. Moro, Ph.D.  
**Co-advisor:** Prof. Ana Paula Couto da Silva, Ph.D.
- 2019–2021 **M.Sc. in Computer Science**, *Universidade Federal de Minas Gerais*, Brazil.  
Analyses of Musical Success based on Time, Genre and Collaboration **GPA:** 92.0 out of 100  
**Advisor:** Prof. Mirella M. Moro, Ph.D.  
**Co-advisor:** Prof. Anisio Lacerda, Ph.D.
- 2015–2018 **B.Sc. in Computer Science**, *Universidade Federal de Minas Gerais*, Brazil.  
Tie Strength in GitHub Heterogeneous Networks **GPA:** 91.3 out of 100  
**Advisor:** Prof. Mirella M. Moro, Ph.D.  
**Co-advisor:** Prof. Michele A. Brandão, Ph.D.
- 2012–2014 **Technical Degree in Computer Networks**, *Centro Federal de Educação Tecnológica de Minas Gerais*, Brazil.

## Professional Experience

- 2021–Present **Data Scientist**, *Analytical Capabilities Project*, UFMG + MPMG.  
Acting in the construction of audit trails to detect evidence of fraud in bids, as well as implementing the classification and enrichment of public expenditure data.
- 2019–Present **Research Assistant**, *Project Både*, Universidade Federal de Minas Gerais.  
Både - Metrics on Data from/to Social Networks in Different Contexts. The objective of this project is to define semantic metrics based on data from social networks aiming at different applications and services for them.
- 2019 **Data Science Intern**, Universidade Federal de Minas Gerais + Localiza Hertz.  
Member of the Data Science Residency Program conducted jointly by the UFMG Computer Science Department and Localiza Hertz. The activities included developing descriptive machine learning models using techniques such as clustering, frequent pattern and association rule mining.
- 2018 **Software Engineering Intern**, dti digital crafters.  
Worked on modeling SQL databases, creating APIs in C# .NET and developing interfaces in HTML5/CSS3 and AngularJS.
- 2017–2018 **Undergraduate Research Assistant**, *Project FoRGit*, Universidade Federal de Minas Gerais.  
FoRGit - Tie Strength Metrics for a GitHub-based Heterogeneous Collaboration Network. The goals of this project include building a heterogeneous social collaboration network from GitHub, analyzing new parameters that measure the interactions between GitHub developers and propose new metrics for their social capital.
- 2016–2017 **Undergraduate Teaching Assistant**, *Computer Science Department*, Universidade Federal de Minas Gerais.  
Teaching assistant in Computer Programming classes for Engineering and exact sciences students.
- 2015 **IT Support Intern**, *Support Center for e-learning*, Universidade Federal de Minas Gerais.  
Developed activities in IT support: network and server management, user support, support to audiovisual content production and web conferencing management.

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## Selected Publications

- 2022 **Musical Success in the United States and Brazil: Novel Datasets and Temporal Analyses**, *Journal of Information and Data Management (JIDM)*, Accepted for publication.  
GP Oliveira, GRG Barbosa, BC Melo, JE Botelho, MO Silva, DB Seufitelli, MM Moro
- Jul 2022 **Analyses of Musical Success based on Time, Genre and Collaboration**, *Thesis and Dissertations Contest – Congress of the Brazilian Computer Society*, Niterói, Brazil.  
GP Oliveira, A Lacerda, MM Moro
- Jul 2022 **Characterizing the Diffusion of Misinformation Regarding the CoronaVac Vaccine in Brazil**, *11th Brazilian Workshop on Social Network Analysis and Mining (BraSNAM)*, Niterói, Brazil.  
GP Oliveira, BF Paiva, APC Silva, MM Moro
- Jul 2022 **Alertas de fraude em licitações: Uma abordagem baseada em redes sociais**, *11th Brazilian Workshop on Social Network Analysis and Mining (BraSNAM)*, Niterói, Brazil.  
LL Costa, APG Reis, CA Bacha, GP Oliveira, MO Silva, MC Teixeira, MA Brandão, A Lacerda, GL Pappa
- Apr 2022 **From Compact Discs to Streaming: A Comparison of Eras within the Brazilian Market**, *Vortex Music Journal*, v. 10, n. 1.  
DB Seufitelli, GP Oliveira, MO Silva, GRG Barbosa, BC Melo, JE Botelho, L Melo-Gomes, MM Moro
- Oct 2021 **Hot Streaks in the Brazilian Music Market: A Comparison Between Physical and Digital Eras**, *18th Brazilian Symposium on Computer Music (SBCM)*, Brazil.  
GRG Barbosa, BC Melo, GP Oliveira, MO Silva, DB Seufitelli, MM Moro
- Oct 2021 **MUHSIC: An Open Dataset with Temporal Musical Success Information**, *36th Brazilian Symposium on Databases - Dataset Showcase Workshop (SBBDSW)*, Brazil.  
GP Oliveira, GRG Barbosa, BC Melo, MO Silva, DB Seufitelli, MM Moro
- Jul 2021 **Ciência de Dados com Reprodutibilidade usando Jupyter**, *Jornada de Atualização em Informática 2021 (JAI)*, Book Chapter.  
JF Pimentel, GP Oliveira, MO Silva, DB Seufitelli, MM Moro
- Jul 2021 **Exploring Brazilian Cultural Identity Through Reading Preferences**, *10th Brazilian Workshop on Social Network Analysis and Mining (BraSNAM)*, Brazil.  
MO Silva, C Scofield, GP Oliveira, DB Seufitelli, MM Moro
- Oct 2020 **Detecting Collaboration Profiles in Success-based Music Genre Networks**, *21st International Society for Music Information Retrieval Conference (ISMIR)*, Montréal, Canada.  
GP Oliveira, MO Silva, DB Seufitelli, A Lacerda, MM Moro
- Sep 2020 **Musical Genre Analysis Over Dynamic Success-based Networks**, *35th Brazilian Symposium on Databases - Workshop of Theses and Dissertations on Databases*, Brazil.  
GP Oliveira, A Lacerda, MM Moro
- Oct 2018 **Tie Strength in GitHub Heterogeneous Networks**, *24th Brazilian Symposium on Multimedia and Web (WebMedia)*, Salvador, Brazil.  
GP Oliveira, NA Batista, MA Brandão, MM Moro
- Aug 2018 **Utilização de Redes Heterogêneas para Medir a Força dos Relacionamentos no GitHub**, *33rd Brazilian Symposium on Databases (SBBDS)*, Rio de Janeiro, Brazil.  
GP Oliveira, NA Batista, MA Brandão, MM Moro

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## Awards

- Oct 2021 **Best Paper Award**, 18th Brazilian Symposium on Computer Music.  
Prize awarded for the paper *Hot Streaks in the Brazilian Music Market: A Comparison Between Physical and Digital Eras*.

- Jul 2021 **Best Paper Award – 1st Runner-up**, 10th Brazilian Workshop on Social Network Analysis and Mining.  
Prize awarded for the paper *Exploring Brazilian Cultural Identity Through Reading Preferences*.
- Oct 2020 **Best Poster Presentation**, 21st International Society for Music Information Retrieval Conference.  
Prize awarded for the paper *Detecting Collaboration Profiles in Success-based Music Genre Networks*.
- Jan 2019 **Best Graduating Student Award – 1st Runner-up**, Universidade Federal de Minas Gerais.  
Prize awarded for students with the highest GPA in the Computer Science Undergraduate Program.
- Oct 2018 **Best Paper in Portuguese**, 24th Brazilian Symposium on Multimedia and Web.  
Prize awarded for the paper *Tie Strength in GitHub Heterogeneous Networks*.

## Skills

Languages Python, C/C++, C#, JavaScript, SQL  
 Hard Skills Machine Learning, Complex Networks, Data Mining, Statistical Analysis  
 Soft Skills Communication, Collaboration, Problem Solving

## Other activities

- 2022 External Reviewer – 11th Brazilian Works. on Social Network Analysis and Mining (BraS-NAM)
- 2021 External Reviewer – 27th Brazilian Symposium on Multimedia and the Web (WebMedia)
- 2021 External Reviewer – 48º Seminário Integrado de Software e Hardware (SEMISH)
- 2021 External Reviewer – 29º Workshop sobre Educação em Computação (WEI)
- 2021 Presenter – 40ª Jornada de Atualização em Informática (JAI)
- 2020 Presenter – 21st International Society for Music Information Retrieval Conference (ISMIR)
- 2020 Presenter – 35th Brazilian Symposium on Databases (SBBD)
- 2018 Presenter and Volunteer – 33rd Brazilian Symposium on Databases (SBBD)
- 2017 Volunteer – 6th UFMG Computer Science Summer School
- 2014 Academic Secretary – 4th CEFET-MG Model United Nations (MOCS)

## Languages

Portuguese **Native**  
 English **Advanced**  
 Italian **Intermediate**  
 Spanish **Basic**

TOEFL ITP score: 613 out of 677 (CEFR B2)