

# Breno Matos

LinkedIn: [linkedin.com/in/brenomatos](https://linkedin.com/in/brenomatos)

Email: [smatosbreno@gmail.com](mailto:smatosbreno@gmail.com)

Homepage: [brenomatos.github.io/](https://brenomatos.github.io/)

## EDUCATION

---

- **Max Planck Institute for Informatics** Saarbrücken, Germany  
August 2025 - Currently  
*PhD in Computer Science Advisors: Anja Feldmann and Savvas Zannettou*
- **Federal University of Minas Gerais (UFMG)** Belo Horizonte, MG, Brazil  
May 2021 - August 2024  
*M.Sc. in Computer Science. Area: Natural Language Processing. Average Grade: 97/100*  
*Thesis awarded a Google Latin America Research Award*
- **Federal University of Minas Gerais (UFMG)** Belo Horizonte, MG, Brazil  
2017 - March 2021  
*B.Sc. in Computer Science Area: Fairness in Information Retrieval. Average Grade: 81/100*

## WORK EXPERIENCE

---

- **Kunumi** Belo Horizonte, Brazil  
July 2024 - August 2025  
*Data Scientist*
  - Led the development of an in-house credit analysis specific LLM.
  - Building automated corporate credit analysis tools using SOTA LLMs. Tasks include (but not limited to) semantic search using FAISS, feature extraction, summarization, implementing agents.
- **Public Prosecutor's Office of Minas Gerais (MPMG) at DCC/UFMG** Belo Horizonte, Brazil  
January 2020 - July 2025  
*Research Development Software Engineer*
  - Worked with state-of-the-art LLMs (LLaMa and CodeLLaMa) to build a conversational text-to-SQL tool that allows users to query MPMG's databases seamlessly.
  - Helped develop a crawler configuration software. Utilized expertise in web scraping to architect solutions for complex data extraction needs. The software allowed the configuration of more than 5000 crawlers to target websites.
  - Developed social media monitoring tools that allowed public prosecutors to gather data for 100+ daily Instagram profiles and monitor 1000+ Whatsapp and Telegram groups. These tools are used to aid investigations and prosecutions by MPMG.
- **Brazilian Institute of Geography and Statistics (IBGE) at DCC/UFMG** Belo Horizonte, Brazil  
October 2020 - March 2021  
*Full Stack Developer*
  - Led the website development for a novel platform that aided IBGE's analysts in calculating economic metrics such as inflation based on product availability online. The platform was built with Django and Reactjs, hosted information about 10,000+ products crawled online, and provided insights on trends and aggregated data analyses.

## ACADEMIC EXPERIENCE

---

- **LATIN & LOCUS labs** Belo Horizonte, Brazil  
May 2021 – October 2024  
*M.Sc. Researcher*
  - Awarded a Google Latin America Research Award
  - Researched radical communities online and misinformation text patterns. Proposed a new misinformation detection task and provided the first data and baselines.
  - Researched virality patterns of songs on TikTok, unraveling a re-popularization effect.
  - Wrote 4 papers (3 accepted, 1 under submission)
- **DataCommons Brazil (partnership between Google and UFMG)** Belo Horizonte, Brazil  
September 2023 – October 2024  
*Research Development Software Engineer*
  - Responsible for building crawlers with Playwright to gather data from Brazilian public agencies from 2,000+ sources. Data Commons is Google's open-data initiative to address major challenges like climate change and health epidemics through public data.
- **Data Science Lab (DLAB) at Swiss Federal Institute of Technology in Lausanne** Lausanne, CH  
July 2022 - October 2022  
*Research Assistant - Summer@EPFL Intern*
  - Worked on a project to assess radicalization online. Built a framework to audit online recommendation systems through 100+ bots that mimicked real-user patterns. Conducted experiments to determine if platforms radicalized users through recommendations and our findings pointed to it not being the case.

- **Social Computing Lab (LOCUS) at DCC/UFMG**  
Research Assistant

Belo Horizonte, Brazil  
October 2017 - February 2021

- Worked on early-pandemic misinformation, gathering data shared across WhatsApp and Telegram groups and generating weekly reports for journalists, who used the reports to debunk COVID misinformation.
- Worked on modeling through complex networks and helped develop a method to analyze governance using voting session data from the US House of Representatives. Also worked with backbone extraction algorithms for dense networks.

## TEACHING AND SERVICES

---

- **ACM Transactions on Social Computing**  
Reviewer

Belo Horizonte, Brazil  
May 2024 – Present

- **Computer Science Department (DCC) at UFMG**  
Head Teaching Assistant

Belo Horizonte, Brazil  
March 2022 - July 2022

- Responsible for overseeing 80+ students' semester projects and weekly activities for the Introduction to Data Science course at UFMG. Work included mentoring students and answering questions related to the coursework.

## SKILLS SUMMARY

---

- **Platforms and Programming:** Python, C/C++, JavaScript, SQL, Bash, Web
- **Tools and Frameworks:** PyTorch, Docker, Jenkins, CI/CD, Git, Elasticsearch, HuggingFace, Django, React.js, NetworkX, Jupyter, Transformers, Sklearn, Playwright
- **Languages:** Portuguese (Native), English (Fluent), French (Beginner)

## SELECTED PUBLICATIONS [GOOGLE SCHOLAR LINK](#)

---

- *Breno Matos, Francisco Galuppo, Rennan C. Lima, Flávio Figueiredo “I’ve Heard This Before: Initial Results on Tiktok’s Impact On the Re-Popularization of Songs.”* – 1st Latin American Music Information Retrieval (LAMIR) workshop, 2024.
- *Breno Matos, Rennan C. Lima, Jussara M. Almeida, Marcos A. Gonçalves, Rodrygo Santos, “Intellectual Dark Web, Alt-lite and Alt-right: Are They Really That Different? A Multi-Perspective Analysis of the Textual Content Produced by Contrarians”* – Social Network Analysis and Mining Journal, Springer.
- *Breno Matos, Rennan Lima, Jussara M. Almeida, Rodrygo L.T. Santos, & Marcos Gonçalves - “On the Presence of Abusive Language in Mis/Disinformation”*, The 13th International Conference on Social Informatics. SocInfo ’22
- Carlos Henrique Gomes Ferreira, Fabricio Murai Ferreira, **Breno Matos**, and Jussara Marques de Almeida. – “Modeling Dynamic Ideological Behavior in Political Networks”. The Journal of Web Science 1 (2019)
- Carlos Henrique Gomes Ferreira, *Breno Matos & Jussara M. Almeida* - “Analyzing Dynamic Ideological Communities in Congressional Voting Networks”. Social Informatics: 10th International Conference, SocInfo 2018
- Daniel Kansaon, Michele A. Brandão, Julio C.S. Reis, Matheus Barbosa, *Breno Matos*, Fabrício Benevenuto - “Mining Portuguese Comparative Sentences in Online Reviews”. XXVI Brazilian Symposium on Multimedia and the Web (2020)
- *Breno Matos, Fabrício Benevenuto, Ana P.C. Da Silva - “A Nudez como Estereótipo de Beleza através das Lentes do Instagram”* – english: [Nudity as a Beauty Stereotype through the Lens of Instagram]. X Brazilian Workshop on Social Network Analysis and Mining, (2021)
- *Breno Matos, Carlos H. G. Ferreira, Jussara M. Almeida - “Analizando a governabilidad presidencial a partir de padrões de homofilia na Câmara dos Deputados: Estudos de Casos no Brasil e nos EUA”* – english: [Analyzing presidential governability based on homophily patterns in the Chamber of Deputies: Case Studies in Brazil and the USA]. In: 7th Brazilian Workshop on Social Network Analysis and Mining (BraSNAM), 2018

## AWARDS AND RECOGNITIONS

---

- **Google Latin America Research Award**  
*Research grant structured as an unrestricted gift - 8,500 USD/42,000 BRL*
- **ICWSM-24**  
*Virtual Attendance Scholarship Award*
- **Best Short Paper**  
*X Brazilian Workshop on Social Network Analysis and Mining, BraSNAM*
- **Best Full Paper Nominee**  
*Social Informatics: 10th International Conference, SocInfo*

Belo Horizonte, BR  
December 2023

Virtual  
May 2024

Virtual  
2021

Saint Petersburg  
2018