

# Bárbara Gomes Ribeiro

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- INTERESTS** Computational Social Science, Data Science, Machine Learning, AI for Social Good
- EDUCATION**
- BSc in Computer Science** 2018 - Present  
*Universidade Federal de Minas Gerais (UFMG)* Current GPA: 4.85/5.00
- Mechatronics Technician** 2015 - 2017  
*Centro Federal de Educação Tecnológica de Minas Gerais (CEFET-MG)*  
High School + technical course in Mechatronics
- EXPERIENCE**
- Research Intern** Jan 2021 - Present  
*Max Planck Institute for Software Systems*  
• I work in the Machine Teaching Group, where I am advised by Dr. Adish Singla. My research focus on Reinforcement Learning, specifically on its application to improve education.
- Research Assistant** Jun 2020 - Present  
*Department of Computer Science, UFMG*  
• My research is a case study of the “Sleeping Giants Brasil” movement on Twitter focused on understanding this form of online activism and its implications. I work under the supervision of Dr. Wagner Meira Jr. and Dr. Virgílio Almeida.
- Research Assistant** Jun 2020 - Dec 2020  
*Department of Computer Science, UFMG*  
• Member of Covid Data Analytics. Studied the use of medical and scientific information on social media during the Covid-19 pandemic. I was supervised by Dr. Wagner Meira Jr. and Dr. Evandro L.T.P. Cunha.
- Teaching Assistant**
- ↔ **Programming and Software Development I** Mar 2020 - Nov 2020  
↔ **Computational Linear Algebra** Aug 2019 - Dec 2019  
*Department of Computer Science, UFMG*  
• Created and marked assignments and exercises;  
• Conducted weekly sessions with students reviewing the course content;  
• Provided students with online support.
- Research Assistant** Jan 2016 - Dec 2016  
*Nucleus of Research in Language and Technology (INFORTEC), CEFET-MG*  
• Research Grant given by the Brazilian National Council for Scientific and Technological Development (CNPq);  
• Development of the project “Desenvolvimento de um mundo de blocos para ações robóticas do robotlplc” (Development of a blocks world for robotlplc robotic actions) with focus on making and recognizing with computer vision techniques a 3D printed world of blocks for robotlplc.
- Volunteer Research Assistant** May 2015 - Dec 2015  
*Nucleus of Research in Language and Technology (INFORTEC), CEFET-MG*  
• Worked on the development of robotlplc, a cartesian robot based on Terry Winograd’s virtual robot SHRDLU.
- PUBLICATIONS**
- B. RIBEIRO, C. LUCAS, G. CARVALHO. Ações robóticas baseadas em PLN incidentes sobre o micromundo do robotlplc. In Proceedings of the Mostra Nacional de Robótica, 2015, Uberlândia.  
(*NLP based robotic actions incident on robotlplc microworld*)
- B. RIBEIRO, C. LUCAS, G. CARVALHO. Desenvolvimento de um mundo de blocos para ações robóticas do robotlplc. In Proceedings of the Mostra Nacional de Robótica,

2016, Recife.  
(*Development of a blocks world for robotplc robotic actions*)

## AWARDS

- Research Grant and Academic Merit Award at Mostra Nacional de Robótica 2015 (*National Robotics Fair*) for the project “Ações robóticas baseadas em PLN incidentes sobre o micromundo do robotplc” (*NLP based robotic actions incident on robotplc microworld*)
- Honored as Featured Application at Mostra Nacional de Robótica 2016 (*National Robotics Fair*) for the project “Desenvolvimento de um mundo de blocos para ações robóticas do robotplc” (*Development of a blocks world for robotplc robotic actions*)
- Bronze medal at Brazilian Mathematical Olympiad of Public Schools

## PROJECTS

**Youtube Histats** 2020

A tool to scrape YouTube extensions and extract historical data, projections and estimated earnings from YouTube channels or videos.

**Women in CBTM** 2020

Data analysis and scraping from the Brazilian Confederation of Table Tennis (CBTM) with focus on understanding women participation in the sport to guide and support new gender-oriented initiatives being proposed to CBTM.

**Academic Project: ENEM data analysis** 2019

Analysis of ENEM’s results and socioeconomic data from candidates and schools with focus on understanding how grades are affected by the student’s background. ENEM is the Brazilian university entrance exam.

## SKILLS

**Computer Languages:** Python, C/C++, SQL, HTML, CSS, JS

**Tools:** Git, Jupyter, Pandas, Numpy, Matplotlib, Seaborn, Scikit-Learn, SciPy, Statsmodels, NLTK, PyTorch

**Natural Languages:** Portuguese (native), English (advanced), French (basic)