

# Gabriel Henrique LOPES GOMES ALVES NUNES

MSc candidate in Computer Science | BSc in Physics

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[Belo Horizonte, Minas Gerais, Brazil](#) [Born September 22, 1990 \(29 year old\) in Brazil](#)



Master's candidate in Computer Science at Universidade Federal de Minas Gerais, Brazil, and Bachelor in Physics from Universidade Federal de Minas Gerais, Brazil. Interested in Formal Methods, Quantitative Information Flow (QIF), Artificial Intelligence, and Neuroscience.

## EDUCATION

- 03/2019 – current Master Degree in Computer Science with a [CNPq](#) Scholarship at the [Graduate Program in Computer Science](#) of [Universidade Federal de Minas Gerais](#). Supervised by [Prof. Mário Alvim](#), from the [INSCRYPT](#) Laboratory.
- › Presentation of [Case Study on Privacy and Transparency in Data Publishing](#) at the [9th Summer School in Computer Science \(YouTube\)](#).
- 03/2014 – 07/2018 Bachelor Degree in Physics at [Universidade Federal de Minas Gerais](#).
- › Publication of [A Geometric Introduction to Lie Groups](#) at the [III National Scientific Initiation and Master Program \(PICME\) Symposium](#).
  - › Publication of [Coupling optical techniques with scanning tunneling microscopy to investigate organic films](#) in the proceedings of the [XV Brazilian Materials Research Society Meeting](#).
  - › Writing of [An Introduction to Raman Spectroscopy](#). Supervised by [Prof. Leandro Malard](#).
- 03/2012 – 12/2013 Bachelor Degree in Nanotechnology at [Universidade Federal do Rio de Janeiro](#). Unfinished.
- 02/2011 – 06/2011 Bachelor Degree in Medicine at [Faculdade de Ciências Médicas de Minas Gerais](#). Unfinished.

## EXPERIENCE

- 09/2019 | Visiting Scholar, [MACQUARIE UNIVERSITY](#), Sydney, New South Wales, Australia
- 11/2019 | Internship at the [Department of Computing](#).  
Supervised by [Prof. Annabelle Mclver](#).
- [Privacy](#) [Transparency](#) [QIF](#)
- 06/2018 | Reporter, [NEOWIN LLC](#), Remote
- 01/2017 | Coverage of the latest science and technology news. Portfolio: [published articles](#).
- [News](#)
- 06/2016 | Scientific Initiation, [UNIVERSIDADE FEDERAL DE MINAS GERAIS](#), Belo Horizonte, Minas Gerais, Brazil
- 03/2016 | Research on electronic structures and electrical properties of surfaces using scanning tunneling microscopy (STM) and photoluminescence spectroscopy.
- › [FAPEMIG](#) Scholarship.
  - › Mentored by [Prof. Gustavo Sáfar](#).
- [STM](#)
- 01/2016 | Undergraduate Tutoring & Technological and Industrial Initiation at the [Room of Physics Demonstrations](#), [UNIVERSIDADE FEDERAL DE MINAS GERAIS](#), Belo Horizonte, Minas Gerais, Brazil
- 10/2014 | Development of a high-resolution and low-cost optical spectrometer. Some parts of the hardware were designed using Dassault Systèmes' SolidWorks and the software was implemented using National Instruments' LabVIEW visual programming language.
- › Development of an electrical Paul's Trap ([quadrupole ion trap](#)).
  - › [PROGRAD](#) & [CNPq](#) Scholarships.
  - › Mentored by [Prof. Elmo Salomão](#).
- [LabVIEW](#) [SolidWorks](#) [Spectrometer](#)
- 01/2014 | Scientific Initiation, [UNIVERSIDADE FEDERAL DO RIO DE JANEIRO](#), Rio de Janeiro, Rio de Janeiro, Brazil
- 08/2013 | Application of vibrational spectroscopy and theoretical calculations to bioinorganic metal-amino acid complexes.
- › [CNPq](#) Scholarship.
  - › Mentored by [Prof. Joanna Ramos](#).
- [Spectroscopy](#)

## SKILLS

**Programming Languages** C, C++, JavaScript, LabVIEW, MATLAB, Python  
**Tools** CSS, Git, HTML, Jupyter, LaTeX, Linux, pandas, SolidWorks, Vim

## LANGUAGES

	Understanding		Speaking		Writing
	Listening	Reading	Spoken Interaction	Spoken Production	
Portuguese	C2	C2	C2	C2	C2
English	C2	C2	C1	C1	C2
Spanish	B1	B1	B1	B1	B1

### Common European Framework of Reference for Languages

Exam	Listening	Reading	Writing	Speaking	Overall	Level	Date
TOEFL iBT	30	28	26	24	108	-	07/2020
IELTS Academic	8.0	8.0	6.5	6.5	7.5	C1	11/2015

## EVENTS

- > 9th Summer School in Computer Science, at the Department of Computer Science ([PDF](#)) ([YouTube](#)) 2020  
*Universidade Federal de Minas Gerais* *Belo Horizonte, MG, Brazil* *Seminary*
- > 8th Summer School in Computer Science, at the Department of Computer Science 2019  
*Universidade Federal de Minas Gerais* *Belo Horizonte, MG, Brazil* *Seminary*
- > VII Summer School in Computer Science, at the Department of Computer Science 2018  
*Universidade Federal de Minas Gerais* *Belo Horizonte, MG, Brazil* *Seminary*
- > III National Scientific Initiation and Master Program (PICME) Symposium ([PDF](#)) 2016  
*Universidade Federal de Minas Gerais* *Belo Horizonte, MG, Brazil* *Symposium*
- > X CBPF'S School, at the Brazilian Center for Physics Research 2015  
*Centro Brasileiro de Pesquisas Físicas* *Rio de Janeiro, RJ, Brazil* *Seminary*
- > XXV School of Physics, at the Department of Physics 2014  
*Universidade Federal de Minas Gerais* *Belo Horizonte, MG, Brazil* *Seminary*
- > 6<sup>th</sup> School of Nanoscience and Nanotechnology 2012  
*Universidade Federal do Rio de Janeiro* *Rio de Janeiro, RJ, Brazil* *Seminary*