

Antonio Guilherme Ferreira Viggiano

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Education

- 2011 — 2013 **General Engineering (Master's degree)**, *École Centrale Marseille*, Double Degree.
Emphasis on Information Technology and Digital Society, GPA 3.9 out of 4 (top 5%)
- Eiffel Excellence Scholarship awarded by the French Ministry of Foreign and European Affairs
 - Led a group of 7 students in a one-year project to develop a real-time air quality monitoring platform
 - President of the International Centrale Marseille students' association for 1 year, responsible for coordinating a group of more than 20 students in the integration of exchange students and in promoting cultural activities
 - Member of the Programming Club, participated in the resolution of many Project Euler problems
 - Relevant coursework: Complex Analysis, Statistical Physics, Continuum Mechanics, Quantum Physics, Electromagnetism, Probability, Statistics, Signal Processing
- 2009 — 2014 **Mechatronics Engineering (Bachelor's degree)**, *Escola Politécnica, Universidade de São Paulo*.
Ranked 2nd best student, weighted average 8.2 out of 10 (top 5%)
- Numerical Calculus Teaching Assistant for 6 months, responsible for giving extra courses, correcting assignments and supervising exams
 - Member of the students' robotics team, ranked the second place in two national competitions
 - Relevant coursework: Calculus, Linear Algebra, Partial Differential Equations, Fluid Mechanics, Solid Mechanics, Thermodynamics, Special Relativity

Research Experience

- 2014 **Undergraduate Researcher**, *Decision Making Laboratory, Universidade de São Paulo, Brazil*.
- Thesis: Proposal of an algorithm and development of a software library for recommendation systems of e-commerce products (Research Advisor: Prof. Fábio Cozman)
- Compared 3 different recommendation algorithms – a user profile method, a hybrid method, and our novel user-item correlation method – according to 8 parameters, establishing guidelines for each use case
- 2010 **Undergraduate Researcher**, *Laboratory of Biomedical Engineering, Universidade de São Paulo, Brazil*.
- Developed a filter that separated images of ventilation and perfusion in electrical impedance tomography using the Hilbert-Huang Transform (Research Advisor: Raul Lima)

Professional Experience

- Nov 2014 **Co-founder & Tech Lead**, *BelugaDB, Brazil*.
— *BelugaDB is a big data platform that provides real-time insights through dashboards and machine learning*
- Aug 2017
- Participated in the main areas of the organization, including the data storage, extraction and visualization divisions, as well as in key activities such as hiring, onboarding, mentoring and strategic planning
- Designed and developed a high-performance columnar database, including its compressed bitmaps indexing strategy, its search algorithms and its distributed architecture, which was capable of processing terabytes of data in milliseconds, outperforming some of the industry's benchmarks
- Mar 2014 **Software Engineer Intern**, *Revmob Mobile Ad Network, Brazil*.
— *Revmob is one of the leading mobile ad networks when it comes to monetization of iOS & Android*
- Oct 2014
- Led the integration team of 5 people which increased the revenue of publishers by 15% by partnering with demand-side platforms and updating the company's software development kit
- Led a task force of 3 people in the development of an anti-fraud algorithm which reduced 80% of all invalid requests by applying a set of rules to suspicious traffic, saving thousands of dollars in refunds
- Helped design the company's onboarding process and security policies

Additional Information

- Languages **Portuguese** Native, **English** Fluent (TOEFL 117/120), **French** Fluent (DALF C1), **Spanish** Intermediate, **Japanese** Basic
- Programming Proficient in C/C++, Node.js, Bash, AWS and related technologies; open source contributor and author of the redis-roaring compressed bitmaps library, one of the top 10 most starred Redis modules in the world
- Hobbies Guitar playing (member of a rock band, played in many small concerts), traveling (studied in different cities in France for 2 years and visited over 20 countries in Europe, Africa, America and Asia); e-learning (completed over 10 online courses in a wide range of subjects, from Philosophy to Quantum Mechanics)
- Charity Work Former member of TECHO (nonprofit organization that fights extreme poverty in Latin America with housing and inclusion programs); mathematics, physics and chemistry teaching assistant in high school