

Quimey Vivas (quimeyv@gmail.com) *

Professional Summary

Acomplished Software Engineer with a strong mathematical background. Experience in big and medium sized companies. Likes building new solutions and solving challenging programming problems.

Skills/Stack

- Python
- Algorithms/Data structures
- AWS/EC2
- Redis
- C++
- PHP
- Javascript
- MySQL/Hive
- Linux/Bash

Work Experience

- **2024-:** *CTO of Open Mind AS, Oslo Norway* I started a new project on the side developing a new company from scratch along with a partner. We focus on bringing AI/LLMs to the journalism business.
- **2023-:** *Operation research consultant for Medtrics Lab LLC, Philadelphia, USA.* Remote role, I help this company develop and maintain a student scheduling system for American schools.
- **2022-:** *Technical lead in Avature, Madrid, Spain.*
- **2019-2022:** *Senior software engineer in Avature, Madrid, Spain.*
- **2018-2019:** *Freelancer developer for upwork.com* Worked in different projects, mostly doing short mathematical optimization (dynamic programming, ILP, heuristics, etc).
- **2017-2018:** *Senior software engineer in Avature, Buenos Aires, Argentina.* I work with a distributed continuous testing system, using python, rabbitmq and aws. While working on the automated test system I slashed AWS costs 70% by implementing several optimizations in the EC2 managing services. I was the owner and main contributor of several other projects including a code coverage tool and a snapshotting tool for code. I also collaborated improving the frontend which required some PHP/JS work.

*github.com/quimey

- **2014-2016:** *Research Scientist in Facebook Inc. California, USA.* As a member of the crowdsourcing team, I was part of the design and implementation of a machine learning framework to improve Facebook's graph quality (in terms of places' attributes).

Also managed several data pipelines used in the product, including some "cheating" detection, quality measurement and data extraction for the ML framework.

In addition, in 2015, I supported an intern who went through a successful internship and got a full time offer.

- **2007-2014:** *Teaching assistant (on different levels) at Mathematics Department of FCEN-UBA.*

List of courses taught: Numerical Calculus; Linear Algebra; Operations Research; Introduction to Differential Geometry; Introduction to Groups, Rings and Modules.

Education ¹

Ph.D.

Generalized Weyl algebras in the Quantum case: isomorphisms and cohomology.

Ph.D in Mathematics from Universidad de Buenos Aires

Advisor: Mariano Suárez-Álvarez

from 2009 to 2012

Degree

Computation of Hochschild cohomology for a family of algebras.

Licenciado en Ciencias Matemáticas from Universidad de Buenos Aires.

Advisor: Andrea Solotar
from 2005 to 2009

Grade Point Average: 9.90

Research

List of peer reviewed publications

- Mariano Suárez-Álvarez and Quimey Vivas, *Automorphisms and isomorphisms of quantum generalized Weyl algebras*
J. Algebra 424 (2015), 540–552. Available in [arXiv:1206.4417](#).
- Andrea Solotar, Mariano Suárez-Álvarez and Quimey Vivas, *Hochschild homology and cohomology of Generalized Weyl algebras: the quantum case.*
Ann. Inst. Fourier (Grenoble) 63 (2013), no. 3, 923–956. Available in [arXiv:1106.5289](#).

Other publications

- Federico Dos Reis, Sergio Gwirc, Julian Haddad and Quimey Vivas, *Adaptación de la impedancia eléctrica de un transductor de ultrasonido piezoeléctrico.*

¹Supported by a Estimulo scholarship from UBA, Ph.D. grant from CONICET and postdoc grant from CONICET

Chapter in TAMI 2012 - Taller de Matemática Industrial, J. Etcheverry, I. Ojea (Eds.). "Cursos y Seminarios de Matemática - Serie B", comisión de Publicaciones del Departamento de Matemática de la FCEN-UBA. Available in <http://cms.dm.uba.ar/depto/public/serieB/serieB8.pdf>

- Yamila Alen, Julieta Campos, Rocío Díaz Martín, Alejandro Ladreyt, Nicolás Murrone, Ignacio Ojea, Lorena Stockdale, Sofía Ruiz Suárez, Mariano Vázquez and Quimey Vivas, *Planificación y programación de tareas en una acería* Chapter in TAMI 2014 - Taller de Matemática Industrial, J. Etcheverry, I. Ojea (Eds.). "Cursos y Seminarios de Matemática - Serie B", comisión de Publicaciones del Departamento de Matemática de la FCEN-UBA. Available in <http://cms.dm.uba.ar/depto/public/serieB/serieB10.pdf>

Talks

- Hochschild homology and cohomology of generalized Weyl algebras: the quantum case; *XXI Encuentro Rioplatense de Álgebra y Geometría Algebraica*, Montevideo, Uruguay, December 5th to 9th, 2011.
- Hochschild cohomology of Weyl algebras; *LX Reunión Anual Unión Matemática Argentina*, Tandil, Buenos Aires, Argentina, September 27th to October 2nd, 2010.

Research visits

- 2013: Stay of 4 months in “Université Blaise Pascal” (Clermont-Ferrand, France) working with professor Thierry Lambre as a fellow of the “Bernardo Houssay” program.
- 2012: Stay of 10 days in “Universidade de São Paulo” (São Paulo, Brazil) working with professor Vyacheslav Futorny in the frame of the project Mathamsud-NOCOSETA.

Others

Programming competitions

- I was the coach of the team representing Universidad de Buenos Aires in the World finals of the ACM-ICPC contest of 2011 held in Warsaw, Poland.
- I represented my university (Universidad de Buenos Aires) in the World Finals of the ACM-ICPC contest of 2009 held in Harbin, China.

Languages

I speak and write Spanish (native speaker), English and French.