# Gastón A. Avila, PhD

Physicist, Software developer  
 **Python**, **Javascript**, **Linux**

I am Argentinean, living in Córdoba. I like to build things.  
Generalization and solving large problems elegantly and efficiently motivate me. I like big cities and public transport.

## Personal Information:

Date of Birth

16th of august 1982

Nacionalities

Argentine, Italian

Work address

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Phone Number

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E-mail

[avila.gas@gmail.com](mailto:avila.gas@gmail.com)

Github

[github.com/avilaton](https://github.com/avilaton)

## Education

2008.05 - 2011.10

*PhD. Theorethical Physics, Potsdam University, Germany.*

Advisor: Prof. Helmut Friedrich. Supported by and carried out at the Max Planck Institute for Gravitational Physics (Albert Einstein Institute)

2002.04 - 2008.04

*Licenciatura en Física, FaMAF, Universidad Nacional de Córdoba, Argentina.*

Average grade obtained 9.57 out of 10. Graduated on the 2008.03.27.

1996 - 2001

High School: Bachiller Técnico Metal-Meácnico especialista en Máquinas Herramienta, Instituto Técnico Renault, Córdoba, Argentina. Graduated with the highest average grade of the class of 2011.

## Teaching Experience

2010.03 - 2010.09

Teaching Assistant: Classical Mechanics. Potsdam University, Germany.

2007.03 - 2008.03

Teaching Assistant (Type A). FaMAF, UNC, Argentina.

2005.03 - 2007.03

Teaching Assistant (Type B). FaMAF, UNC, Argentina.

## Informatics skills

OSs

Linux (Ubuntu), Mac OS X

Languages

Python, JavaScript, SQL, Html5, CSS

GIS, geolocation

OpenStreetMap, JOSM, Merkaartor, Maperitive, Mapnik

Client side

Backbone.js, Angular.js, Openlayers.js, Google Maps API v3

Server side

WSGI Python (Flask, Bottle), Node.js (Express.js), RESTful APIs using SWAGGER,

Databases

PostgreSQL, SQLite, mongoDB,

## Work experience

08/2014 - now

Sistemas Globales S. A., web UI analyst Senior. Tech Lead in hybrid proyect using angularjs + cordova for iPhone. Client: Virgin Mega

04/2014 - now

Ministerio de Transporte de la Provincia de Mendoza, technical advisor in applications to public transit. Web apps for geo-location, data analysis and modeling.

04/2013 - 08/2014

Sistemas Globales S. A., web UI analyst. Tech Lead in node.js + Backbone.js. Client: Thomas Cook

12/2011 - 06/2014

Municipalidad de Córdoba, technical advisor in applications to public transit. Comisión de Movilidad Integral. Web apps for geo-location, data analysis and modeling.

04/2008 - 11/2011

Max Planck Institute for Gravitational Physics, Albert Einstein Institute.

## Languages

Spanish

Native.

English

Professional proficiency

## Honors

2001

Graduated Top GPA of the Senior class - Instituto Técnico Renault.

2001

Awarded Academic Excellence Price, by Banco Roela, Argentina.

## Publications

* *Asymptotic staticity and tensor decompositions with fast decay conditions*, (Doctoral disertation), Gastón A Avila, PhD, 07.10.2011. [Institutional Repository of the University of Potsdam](http://opus.kobv.de/ubp/volltexte/2011/5404/)
* *The Yamabe invariant for axially symmetric initial data of two Kerr black holes.* Gastón A Avila and Sergio Dain. [Classical and Quantum Gravity, 25(22):225002 (13pp), 2008.](http://iopscience.iop.org/0264-9381/25/22/225002)

## Talks

* Tensor decompositions with fast decay conditions at space-like infinity, Grav11 - FaMAF, Córdoba, Argentina. 11/04/2011.
* Tensor decompositions with fast decay conditions at space-like infinity, Workshop on Mathematical Relativity - ESI, Vienna, Austria. 28/01/2011.
* The Yamabe invariant for axially symmetric two Kerr black holes initial data, Grav09 - Córdoba Argentina. 15/04/2009.

## Scientific Meetings

* Grav11, Congress on General Relativity and Gravitation (FaMAF), La Cumbre, Córdoba, Argentina. 11/04/2011 - 15/04/2009.
* Workshop on Mathematical Relativity, International Centre for Mathematical Science - Edinburgh, UK. 1/09/2009 - 7/09/2010.
* Seminar on Mathematical Relativity - Erwin Schroedinger Institute, Vienna, Austria. 27/01/2011 - 29/01/2011.
* Space, Time and Beyond. Conference in honor of Helmut Friedrich's birthday. 08/10/2009 - 09/10/2009.
* Grav09, Congress on General Relativity and Gravitation, FaMAF, Córdoba, Argentina. 13/04/2009 - 17/04/2009.
* Grav07, Congress on General Relativity and Gravitation, FaMAF, Córdoba, Argentina. 5/11/2007 - 7/11/2007.
* Grav06, Fifty years of FaMAF Workshop on Global Problems in GR, FaMAF, Córdoba, Argentina. 6/10/2006 - 11/10/2006.

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