

# Gastón A. Avila, PhD

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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.

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## Personal Information:

### **Date of Birth**

16th of august 1982

### **Nacionalities**

Argentine, Italian

### **Work address**

Capitalinas Building, Humberto Primo 630, 3th floor 5000, Córdoba, +54 11 4109 1700

### **Private address**

Almirante Brown 340, X5002IWH, Cordoba, Argentina

### **Phone Number**

+549 3512 055 880

### **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. Theoretical 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.*

Graduated March 27th, 2008. Grade point average 9.57 out of 10.

### **1996 - 2001**

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

## Informatics skills

### **Backend**

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

### **Frontend**

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

### **Databases**

PostgreSQL, SQLite, mongoDB,

### **GIS, geolocation**

OpenStreetMap, JOSM, Mapnik

## Work experience

### **01/2016 - present**

Squaretrade.com, senior web developer. Uses Flask and Angularjs to build an application responsible for the operation of mobile

technicians and scheduling/managing phone repairs over different cities in the US. (Flask, Angularjs, Webpack, Postgresql, AWS Elasticbeanstalk).

**06/2015 - 01/2016**

Junar.com, web UI analyst Senior. Frontend developer. (Django, Backbone).

**04/2014 - 06/2016**

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

**06/2015 - 11/2015**

bahia.presupuestoabierto.org, Web UI analyst. Frontend developer (Angular.js). SQL analyst (Oracle).

**08/2014 - 06/2015**

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

**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. Responsible for the integration of city transit data with Google Inc.

**04/2008 - 11/2011**

Max Planck Institute for Gravitational Physics, Albert Einstein Institute.

## Languages

**Spanish**

Native.

**English**

Professional proficiency

## 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.

## 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](#)

*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.

## 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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