# 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

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

#### **Private address**

9 de Julio 2108, 2do A, X5003CQL, Cordoba, Argentina

#### **Phone Number**

+549 3512 055 880

### E-mail

avila.gas@gmail.com

### **Github**

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**

# 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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