# Jose Pablo Alberto Andreotti

(54) 351-4730292 albertoandreotti@gmail.com (54) 351-155937792

## **Personal Information**

Nationality, Argentinian/Italian.

Address, 552, Emilio Castelar Street, Córdoba. Argentina.

#### Education

# Distributed Systems, MSc.

Famaf, University of Córdoba, 2009.

Average Grade: 8.87/10.

Final Project: High Scalable Scientific Computing using Hadoop, found here.

## Computer Engineer, MSc.<sup>1</sup>

Engineering Faculty, University of Córdoba, 2007.

Average Grade: 8.14/10.

Thesis: Building a dual core JVM for embedded realtime systems, found here.

# High School at Colegio Corazón de María

Management Oriented School, 2000.

Average Grade: 8.22/10.

# **Professional Experience**

2010 to present	<ul> <li>Sr. Software Engineer at Intel Corp.</li> <li>▷ Development in C/C++ and Java in Windows and Android.</li> <li>▷ Development of Web Services in Python/Django and Scala/Akka.</li> <li>▷ Development of a distributed graph database for query graph processing.</li> </ul>
2008 to 2010	Software Engineer at Motorola.
	▷ Development of embedded software in C/C++ for Cable Modem products.
2006 to 2008	Research Internship, Computer Architecture Lab, UNC.
	▷ Optimization of Scientific programs over computer clusters and
	parallel programming with MPI, HPF and OpenMP.
	$\triangleright$ Software development and testing in C/C++.
2007	Self-employed in Software Optimization.
	I worked in projects involving the optimization of scientific
	applications in multiprocessor systems.
2007	Testing of the JOP processor and JDK.
	I worked testing JOP(Java Optimized Processor) for Dr. Martin
	Schoeberl from TU Wien.

<sup>&</sup>lt;sup>1</sup>This degree is the equivalent to the European Master level, it is obtained through 5 years of course work and 1 year of research. The Argentinian name is "título de grado".

## **Additional Coursework**

- ⊳ Functional Programming Principles in Scala, Martin Odersky. Ecole Polytechnique Federale de Lausanne, December of 2013. Link here.
- ▶ Image and video processing: From Mars to Hollywood with a stop at the hospital, Guillermo Sapiro, Duke University, first semester of 2013. Link here.
- ▷ Digital Signal Processing, Paolo Prandoni and Martin Vetterli, Ecole Polytechnique Federale de Lausanne, first semester of 2013. Link here.
- ▶ Machine Learning², Andrew Ng, Stanford University, first semester of 2012. Link here.
- ▶ High Performance Computing: Models, Methods and Means<sup>3</sup>, first semester 2010.
- ▶ The Semantic Web, PhD Jorge Cardoso, SAP Research Germany, first semester of 2009.
- ▷ Introduction to Radar Signal Processing, Msc Oscar Bria, INVAP, second semester of 2009. Syllabus.
- ▶ Performance and Scaling in E-Commerce Systems WS, Alex Buchmann, second semester of 2008. Syllabus.

### Scholarships and Awards

- ⊳ Fulbright Master Scholarship. Given by the US Embassy in Buenos Aires and the Fulbright Comission.
- ▷ Grant earned for the completion of the Thesis Project. Given by the Science Agency of Córdoba, 2006.
- ▷ Distinction to the best average grade. Given by the College of Engineering of Córdoba, 2007.

#### **Publications**

- ⊳ Infrastructure for enabling fast machine learning application prototyping in the cloud. Intel SWPC, Guadalajara, MX, 2013.
- $\triangleright$  I contributed to Deep LearnToolbox, an open source Deep Learning toolbox written in Matlab. I added features to the CNN<sup>4</sup> part of the toolbox and added an example for Spoken Language Classification<sup>5</sup>
- ⊳ Recommendations for Movies using Distributed Pattern Matching. Intel SWPC, Córdoba, AR, 2013.
- ▷ Optimization of an hydrodynamical bi-dimensional model. ENIEF, Congress on Numerical Methods and their Applications, 2009, link.
- ▶ Using JOP to build a chip multiprocessor JVM for embedded realtime systems. Annals of CACIC, 2007.

### Programming Experience

- ▷ Development of embedded Software in C/C++, and Java.
- ▶ Experience on mobile platforms such as Android and iOS.
- Experience with RESTful Web Services on Python/Django and Scala/Akka/Play.
- ▶ Test Development in Bash/Python/Java.

<sup>&</sup>lt;sup>2</sup>This is the online version of the course.

<sup>&</sup>lt;sup>3</sup>Unstructured Postgraduate, and Graduate Course, Fa.M.A.F. Sincronized with Prof. Thomas Sterling's CSC7600.

<sup>&</sup>lt;sup>4</sup>Convolutional Neural Network.

<sup>&</sup>lt;sup>5</sup>Based on the research found in this paper

- ▶ Experience in Linux Drivers development.
- ▶ Experience working with AWS EC2.
- ▶ Experience in profiling and performance optimization.
- ▶ Deep knowledge of computer architectures, and assembly programming.

## Languages

## Spanish

▷ Native Spanish speaker.

#### German

▷ Currently attending the third year of a four year course in German at the School of Languages of the National University of Córdoba.

#### **English**

- ▶ TOEFL iBT. Outcome 109 out of 120, November 2010.
- ▶ TOEFL iBT. Outcome 110 out of 120, March 2008.
- ▶ First Certificate Examination grade B. Given by Cambridge University, 2000.
- ▷ Several courses attended from 1992 to 2000.

#### Italian

⊳ Four years course at the School of Languages of the National University of Córdoba, 2008.

#### French

⊳ One year course at "Alliance Française Córdoba", 2000.

# Teaching Experience

## **Concurrent Programming**

Computer engineering faculty, 2004.

#### **Calculus Tutor**

Electronic and Computer engineering faculty, 2003.

### Conferences attended as a lecturer

## Intel Software Professional Conference, 2013.

Title: Prototyping Machine Learning Apps in the Cloud.

ENIEF, Congress on Numerical Methods and their Applications, 2009.

Title: Optimization of an hydrodynamical bidimensional model.

Second Open Conferences in Computer Engineering, National University of Córdoba, 2008.

Title: Parallel Programming.

First Open Conferences in Computer Engineering, National University of Córdoba, 2007.

Title: A multiprocessor JVM based on JOP.

XIII Argentinian Congress on Computer Science, 2007.

Article's Title: Using JOP to build a chip multiprocessor JVM for embedded real-time systems.

# **Hobbies**

- ▷ Trekking.
- ▷ Cooking and beer brewing.