# Eloy Adonis Colell

Master degree in Bioinformatics and Biology Systems 

### **Academic Formation**

2014–2018 **Master Degree in Biology Systems And Bioinformatics**, *Universidad Nacional del Noroeste de la Provincia de Buenos Aires*, Pergamino.

2005–2013 Licenciate Degree in Information Systems, Universidad Nacional de Luján, Luján.

2002–2005 **Bachelor Degree in Information Systems Analyst**, *Universidad Nacional de Luján*, Pergamino.

1999–2001 **High school Title oriented to Natural Sciences**, *Institulo Comercial Rancagua*, Rancagua.

1997–1998 **Basic General Education**, School  $N^o$  54, Rancagua.

1989–1996 Basic General Education, School  $N^o$  62, Pergamino.

### Jobs Timeline

2016–2017 **Software Developer in Willdom SA**, Willdom SA, Remote.

I collaborated with the development and maintenance of the SquareTradeGo online sales platform (on web and iOS).

2012–2016 Lead Software Developer at GERSolar, Universidad Nacional de Luján, Luján.

I have worked on developing an architecture of satellite image processing, which has to estimate solar radiation at ground level, for the whole area of Argentina.

Techonologies used: Python, twisted, netcdf, PyCUDA, CUDA, Heliosat2.

Git: https://github.com/gersolar. Reference: raulrighini@yahoo.com.ar

2010–2012 Researcher en el LIMIE, Pergamino.

I collaborated on the development of a RRHH plaform for a local business. Also, I have collaborated in the development of a portable ultrasound device to detect distances and assist blind people to recognize some obstacles.

Technologies used: C (ARM-embbeded), LPC1343, Ruby.

2007–2009 Laboratory assistant at LIFIA, Universidad Nacional de La Plata, La Plata.

I was part of the development team of a testing platform for a communication protocol commonly used in the slot machines. The platform had two sides the Control of the User Interface developed with Python, and the Communication Backend developed in C++; both sides were integrated through a Lua stack.

Languages used: C++, Python, Lua.

Reference: federico.balaguer@lifia.info.unlp.edu.ar.

2008 **Collaborator in the Object Orientation 1 course**, *Universidad Nacional de La Plata*, La Plata

I worked as a collaborator to help students in the understanding and resolution of the practical exercises related with Object Oriented Programming.

Language used: Smalltalk.

2006–2008 **Second assistant in the Programming III course**, *Universidad Nacional de Luján*, Luján.

I worked as an assistant to help students in the understanding and resolution of the practical exercises related with Object Oriented Programming Languages. Languages used: Smalltalk, Java.

Reference: alejandro.fernandez@lifia.info.unlp.edu.ar.

## Academic Expertise

2018 Development of a Bioinformatic Tool to study Coevolution in protein families, *Master Degree Thesis*.

I presented a platform in collaboration with the Leloir Institute to evaluate differents algorithms to estimate coevolutión between two protein positions from protein family data. Available on: https://mistic2.leloir.org.ar

2016 **Machine Learning**, Specialization course from the Stanford University through the Coursera website.

It explains algorithm and math of some the automatic learning algorithms, explain the basics of the datamining and present the statistical pattern recognition.

Technologies used: Octave, Supervised Learning, Unsupervised Learning.

2013 Adaptability to the context in web applications based on Continuations, *Licentiate Degree Thesis*.

It present a model to work with context-aware adaptations in web applications through continuations, while it try to mantain the privacy of the web application user.

Technologies used: Smalltalk, Seaside, Meteorite, PhoneGap, Android.

2012 Calculate Solar Radiation through imágenes of a MSG satellite, Specialization course in satellite image processing at the University of Jaen (Spain).

We replicated a study already done on the area of Andalusia (Spain) using satellite images Meteosat Second Generation.

Technologies used: Python, Heliosat2.

2011 Coaching and Leadership Seminar, Dictated by Lic. Fabiola Robin Marquez.

This course introduces the types of leadership, motivation, influence, conflict / mediation / resolution, decision-making and coaching.

2010 Geostatistic Basic Concepts, Update Seminar II.

I wrote a document to introduce the basic concepts of geostatistic to other professionals. Technology used: Temporal series, Kriging.

2009 **Fundamentals of testing and functional testing techniques**, *Centro de Ensayos de Software*.

Coursed at the Faculty of Informatics, University of La Plata.

Technologies used: UnitTest, IntegrityTest.

2006 **South Supermarkets**, *Computer Lab III*, #PHP #MySQL #Apache.

It was an application that manages an on line market.

Technologies used: Apache, PHP, JavaScript.

2006 **DES Solar Energy**, Expert systems, #Smalltalk.

It was an application that allows to estimate the size of a home electric system based on solar energy using the experience of Ing. Raul Righini (UNLu).

Technology used: VisualWorks Smalltalk.

2006 **TSP with Genetic Algorithm v1.0**, *Artificial intelligence*, #Smalltalk.

It is an application that tries to solve the "Travelling Salesman Problem" using genetic algorithms.

Technology used: VisualWorks Smalltalk.

2006 **Tetris v1.2**, Object Oriented Programming, #Smalltalk.

This is a simple version of tetris.

Technology used: VisualWorks Smalltalk.

2005 Roberto Insausti SA (Pergamino), Professional seminar.

Analysis and design of possible solutions to the company Roberto Insausti SA.

2004 **Gnat v1.4**, Update Seminar I.

This is a graphical application showing a reactive simulation of a mosquitou's behavior. Language used: Delphi.

2003 Library System v4, Applied programming.

It is a non-graphical application that manages a simple library system.

Technologies used: Perl, Firebird.

## Knowledges

Modeling design patterns, refactoring, ma-

chine learning

Services apache, subversion, git

Networking tcp/ip, route, nat, filters, iptables

Weak typing javascript (angularjs, jquery, languages knockoutjs, lodash, nginx, pro-

totype, protractor, webpack), lisp, lua, octave, perl, php, prolog, python (django, flask, mocker, pytest, sqlalchemy), ruby (rails 5.1), smalltalk (seaside,

meteoroid), xml, xsl

Utilities gimp, vim, html, css, ssh, makefile,

docker

Languages

Español Nativo

English Middle level

汉语 初始水平

References

MBA Jeff Wang wang.jeffc@gmail.com.

Dr. Gastón avila.gas@gmail.com.

Ávila

Dr. Raúl Righini raulrighini@yahoo.com.ar.

Dr. Alejandro alejandro.fernandez@lifia.info.unlp.edu.ar.

Mg. Gabriel tolosoft@unlu.edu.ar.

Tolosa

Fernández

3/4

DB

firebird, mongodb, mysql, postgresql, sqlite3

Virtualization virtualbox, kvm

OS gnu/linux, osx, windows

Strong typing assembly, c/c++ (boost, asio, stl, languages lpc1343), delphi, java (android),

LATEX, objective C (iOS 11), visual

basic

Mg. Fernando **fernando.bordignon@gmail.com**. Bordignon