Eloy Adonis Colell

Master degree in
Bioinformatics and Biology Systems

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34 years old

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.

Publications

2018 **MISTIC2: comprehensive server to study coevolution in protein families**, *Colell, EA et. al.*, Nucleic Acids Research.

Jobs Timeline

2018–2020 **Senior Software Developer**, *as Freelance contractor*, Remote.
I collaborated with the development and maintenance of some projects. Involving technologies like Flask, Celery, Objective C, SwiftUI, Docker Compose, and many others.

2020 **Bio Sciences Programming Concepts**, *Coordinator*, Remote.
I collaborated with the development and teach of UNNOBA's Master class into the Bioinformatics and Biology System plan.

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, machine learning**
Services	**apache, subversion, git, nginx**
Networking	**tcp/ip, route, nat, filters, iptables**
Weak typing languages	**javascript (cypress, reactjs, angularjs, jquery, knockoutjs, lodash, prototype, 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**
DB	**firebird, mongodb, mysql, postgresql, sqlite3**
Virtualization	**virtualbox, kvm**
OS	**gnu/linux, osx, windows**
Strong typing languages	**assembly, c/c++ (boost, asio, stl, lpc1343), delphi, java (android), LaTeX, swift (iOS), objective C (iOS 11), visual basic**

Languages

Español	**Nativo**
English	**Middle level**
汉语	**初始水平**

References

MBA Jeff Wang **wang.jeffc@gmail.com**.

Dr. Gastón Ávila	**avila.gas@gmail.com**.
Dr. Raúl Righini	**raulrighini@yahoo.com.ar**.
Dr. Alejandro Fernández	**alejandro.fernandez@lifia.info.unlp.edu.ar**.
Mg. Gabriel Tolosa	**tolosoft@unlu.edu.ar**.
Mg. Fernando Bordignon	**fernando.bordignon@gmail.com**.