

SOFTWARE DEVELOPER · RESEARCHER

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Summary _

Co-founder and director of Software Research and Development at SoftButterfly. With more than 5 years of experience in software development and 3 years of experience in both computer security and cloud infrastructure.

I like science and I am always looking for the best way to solve theoretical or experimental problems by applying information technology to achieve a better understanding of the world.

Studies

Universidad Nacional Mayor de San Marcos

Lima, Perú

B. S. EN FÍSICA Mar. 2008 - PRESENT

Skills ____

Programming Python, C, C++, C#, Fortran, Matlab, Mathematica, JavaScript, LaTeX, Java, Julia, Kotlin

Libraries LAPACK, BLAS, Intel MKL, ILnumerics, OpenCV, Cuda, OpenGL, SFML

Hardware Arduino, Raspberry Pi

Mobile Android

Web Wagtail, Django, Flask, Express, HTML5, CSS3, SASS, Gulp

Databases MySql, MariaDB, PostgreSql, Redis, SQLite

Cloud Amazon Web Services, Google Cloud Platform, IBM Bluemix

Languages Español, Inglés

Experience _____

SoftButterfly Lima, Peru

CO-FOUNDER AND DIRECTOR OF SOFTWARE RESEARCH AND DEVELOPMENT

Feb. 2017 - PRESENT

- New Relic instrumentation in conjunction with Atentus for the Interbank BPI website in VueJs.
- New Relic implementation in conjunction with Atentus for Sura's internal management systems.
- Development of and eLearning platform with Django, Wagtail, Bootstrap and PostgresSQL.
- · Development of a survey generator and alalysis system with Django, Django RestFramework, VueJS and PostgreSQL.
- Infrastructure implementation of internal SoftButterfly systems using various tools from the AWS stack.
- Research and development of meteorological stations using commodity hardware and a customized IoT system with Django, Django RestFramework, Bootstrap and PostgreSQL.
- Research for the development of a monitoring and recovery system for meteorological balloons.
- Research for the development of a mosquito characterization system by the frequency of its flutter.

National Service of Meteorology and Hydrology of Perú - Senamhi

Lima, Peru

Mar. 2016 - PRESENTE

EXTERNAL FORTRAN CONSULTANT

Nov. 2017 - May. 2018

- Fortran Training
- Development of data analysis programs.

HackSpace Perú Lima, Perú

LEAD TRAINER Jan. 2015 - Dec. 2019

- Full stack web development coach at the PADT 2017 (High Technological Performance Program) in collaboration with the Ministry of Production of Peru.
- IoT coach of the CoreUpgrade 2017 face-to-face training.
- Backend development coach of the CoreUpgrade 2016 face-to-face training.

HackSpace Perú Limo, Perú

LEAD SOFTWARE DEVELOPER

• Planning, design, development and implementation of the entire web infrastructure of HackSpace Peru.

- Flaming, design, development and implementation of the entre web impaction of nackspace Per
- Implementation of e-Learning system for the CoreUpgrade 2017 annual training program.

MARCH 22, 2020 MARTÍN VUELTA · CV

Grupo RPP Lima, Perú

Ago. 2017 - Sep. 2017 WEB DEVELOPER FREELANCE

- Development of interactive web visualizations using GreenSock, D3JS and HighCharts.
 - Las cifras del caos.
 - El viaje de la papeleta..
 - Las victimas mortales.
 - Cinco años de tragedias.

DGT Digital Lima, Perú

IT SECURITY AND WEB DEVELOPMENT CONSULTANT WITH PYTHON

Feb. 2017 - Mar. 2017

- Web development training backend with Python and Django.
- Computer Security Training following the OWAS Standard to improve the security of your computer systems.
- Training of use and configuration of Nginx and SSL.

UnionLabelNet Lima, Perú

DYNAMICS NAV DEVELOPER

Dic. 2016 - Mar. 2017

- ERP system developer with Microsoft Dynamics NAV.
- Development of the VSCode C-AL plugin to improve the efficiency in Microsoft Dynamcis NAV C-AL programming.

HackSpace Perú Lima, Perú

Nov. 2015 - Nov. 2016 SOFTWARE DEVELOPER

- Frontend development of HackSapce web services.
 - Promotional Website for Community Training 2015
 - Promotional Website for the CoreUpgrade 2016

National Aerospace Research and Development Commission - Peru Space Agency

Lima, Perú

Apr. 2014 - Dec. 2015 RESEARCH ASSISTANT TRAINEE

- Research on algorithms for predicting solar activity.
- Development of meteorological monitoring systems.
- · Automation calculation of ephemeris.

DJEngineering Lima, Perú

SOFTWARE DEVELOPER Jul. 2015 - Jul. 2016

• Support and development of features in backend and frontend of web systems.

Metrología y Técnicas CP

Lima, Perú

Jun. 2012 - Dic. 2012

METROLOGY TECHNICIAN

TEACHER

Jul. 2013 - Dic. 2013

- · Metrology technician for the calibration of equipment for measuring mass, length, time, volume, temperature, humidity and force.
- Automation of calibration data analysis using Matlab.
- Preparation of measurement scripts and sieve calibration report template following the specifications of NTC 32 (Colombian Technical Standard)

Pro Ciencia Lima, Perú

TEACHER Mar. 2013 - Jun. 2013

• Teacher of the Chemistry course of secondary and primary level.

TRENTO Lima, Perú

· Physics and Chemistry teacher high school level.

TRENTO Lima, Perú

Abr. 2009 - Ago. 2009 TEACHER

· Academic advisor of the courses of Arithmetic, Algebra, Geometry, Trigonometry, Mathematical Reasoning, Physics and Chemistry of secondary level.

Reconocimientos

| 2016 | 6to Lugar , II Programming Contest - IEEE Brain Coding 1.5 | Perú |
|------|---|------------|
| 2015 | Reconocimiento , For participation in the event "Creating, Innovating: Technological solutions for | Lima, Perú |
| | a more representative congress " organized by the Congress of the Republic of Peru | |
| 2014 | Microsoft Active Professional, Microsoft | Lima, Perú |
| 2013 | Microsoft Active Professional, Microsoft | Lima, Perú |
| 2012 | Microsoft Active Professional, Microsoft | Lima, Perú |



Basic security measures for servers

Universidad Privada del Norte,

Lima, Perú

I FORUM OF TECHNOLOGIES AND ENTREPRENEURSHIP

Jun. 2017

• Practical guides for configuring security headers for web servers with emphasis on nginx.

Cellular Automata with Python

Universidad Privada del Norte,

Lima, Perú

CODE DAY May. 2017

• On how I deepened my interest in cellular automata after watching the video "I'm humanity" by Etsuko Yakusimaru. Practical examples of cellular automata made in Python.

• G Github: https://github.com/zodiacfireworks/code-day-2017--cellular-automata

Jupyter Notebook: An Interactivo Programming Environment

Universidad Privada del Norte,

Lima, Perú

FLISOL LIMA

May. 2017

• About the use of Jupyter notebook in teaching and in advanced real-work environments. Practical examples in mathematics and data analysis with Spark.

• Github: https://github.com/zodiacfireworks/talk--jupyter-notebook

Fedora, Python y Arduino

Puno, Perú

FUDCON: FEDORA USERS AND DEVELOPERS CONFERENCE

Oct 2016

- On how to build a desktop application with Python and Qt for the collection of data from various sensors connected to an Arduino board.
- Github: https://github.com/zodiacfireworks/arduino-serial-monitor

High performance computing with Python

Universidad de Piura, Piura, Perú

XXIII INTERCON International Congress of Engineering, Electronics, Electrical and Computing

Ago. 2016

- Introductory workshop to high performance computing in Python.
- Github: https://github.com/zodiacfireworks/talk--jupyter-notebook

Algoritmos computacionales para el análisis de actividad solar.

Piura, Perú

ENCUENTRO CIENTÍFICO INTERNACIONAL

Jul. 2015

Solar cycle forecasting. Cusco, Perú

X CONFERENCIA LATINOAMERICANA DE GEOFÍSICA ESPACIAL

Sep. 2014

Sobre el problema gravitacional inverso en gravedad newtoniana.

Cusco, Perú Oct. 2012

XI SIMPOSIO PERUANO DE FÍSICA Y V CONGRESO PERUANO DE FÍSICA MÉDICA

Movimiento de partículas cargadas en campos electromagnéticos.

Cusco, Perú Oct. 2012

XI SIMPOSIO PERUANO DE FÍSICA Y V CONGRESO PERUANO DE FÍSICA MÉDICA

Simulaciones Magnetohidrodinámica en física del plasma. XV Simposio Nacional de Estudiantes de Física Cusco, Perú Nov. 2011

Cursos.

Arduino

The SCOSTEP/ISWI ISSS

Lima, Perú

Instituto Geofísico del Perú

Sep. 2014

Universidad Nacional de Ingeniería

Lima, Perú Ene. 2013

Programación Científica con MatLab

Lima, Perú

LABORATORIO DE FÍSICA DE EVENTOS NATURALES

Ene. 2013

5th School of Cosmic Rays and Astrophysics

Universidad Mayor de San Andrés

La Paz, Bolivia

Ago. 2012

CETQ-Fermilab School QCD and Electroweak phenomenology

PONTIFICIA UNIVERSIDAD CATÓLICA DEL PERÚ

Lima, Bolivia Jul. 2012 - Ago. 2012

Curso de Gestión Organizacional

Lima, Perú

PROPOLI, MIMDES Y LA UNIÓN EUROPEA.

Nov. 2006 - Mar.2007