



# Edinson Andrés Solarte Casanova

## PERSONAL INFORMATION

**Date of birth**

**Place of birth**

**Nationality**

## EDUCATION

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|------------------------|---|
| <b>04/2019-Present</b> | <b>PhD candidate of Geomatics and Space Systems</b><br>National University of Córdoba, Córdoba (ARG)<br>Thesis: <i>“Development of an Interferometric Processor for the Generation of High Accuracy Digital Elevation Models from SAOCOM Data”</i>                                  |
| <b>08/2014-08/2018</b> | <b>Master of Spatial Applications for Early Warning and Response to Emergencies</b><br>National University of Córdoba, Córdoba (ARG). Average grade: 8.67 (Scale 0–10, 10 best, 0 worst)<br>Thesis: <i>“Implementation of a Web Tool oriented to support environmental studies”</i> |
| <b>08/2006-05/2012</b> | <b>Topographical Engineer</b><br>University of Valle, Cali (COL). Average grade: 4.07(Scale 0–5, 5 best, 0 worst) 5-year diploma program  |

## WORKING EXPERIENCE

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| <b>04/2021-today</b> | <b>Lecturer</b><br><i>National University of Córdoba, Córdoba (ARG).</i><br>Provide support for academic and research activities at Mario Gulich Institute. |
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**03/2020-06/2020**

**PhD Trainee**

*Institute for Special Training and Development of Computer Aided Engineering (CEDIAC), Mendoza (ARG).*

Adaptation of ISCE Software and SAOCOM Data Ingest for Interferometric Processing. Available at:

[https://github.com/isce-framework/isce2/blob/main/components/isceobj/Sensor/SAOCOM\\_SLC.py](https://github.com/isce-framework/isce2/blob/main/components/isceobj/Sensor/SAOCOM_SLC.py)

**03/2018-04/2021**

**Teaching and Research Assistant**

*Jorge E. Kittl Foundation, Córdoba (ARG).*

Provide support for academic and research activities at Mario Gulich Institute, National Commission of Space Activities (CONAE). Development and management of a WebGIS platform. Available at:

<http://aplicaciones.ig.conae.gov.ar:8080/visor2/>

**04/2018-12/2019**

**Freelance**

*Córdoba (ARG).*

Development of processing scripts using Python and R Cran languages for WebGIS viewer implementation.

**06/2016-03/2018**

**Research Assistant**

*National University of Río Negro, Bariloche (ARG).*

Automation of MERRA reanalysis data processing using python programming language. Development and implementation of a Geographic Information System (GIS) using open-source tools for wind resource prospection in the province of Río Negro, Argentina.

**11/2015-02/2016**

**Topographical engineer**

*Solución Satelital Company, Cali (COL).*

Interpretation and edition of mangrove cover layers in Colombian Pacific from satellite images.

**10/2013-04/2014**

**Professional assistant**

*Hidrovital Ltda Company, Cali (COL).*

Technical supervision of photogrammetry, satellite imagery, GPS and Geovisor development groups in the development of the inter-administrative agreement No. 041 of 2013 signed between the Regional Autonomous Corporation of Valle del Cauca (CVC) and the University of Valle (COL).

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03/2013-05/2013

**Topographical engineer**

*Solución Satelital Company, Cali (COL).*

Classification and interpretation of land cover in Arauca, Arauquita and Saravena municipalities(COL) from Landsat5 TM and Landsat7 ETM+ images

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**TEACHING ASSIGNMENTS**

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03/2022-06/2022

**Digital Satellite Imagery Processing, Professor.** Gulich Institute (CONAE), Córdoba (ARG).

11/2021-12/2021

**Digital Satellite Imagery Processing, Professor.** Gulich Institute (CONAE), Córdoba (ARG).

03/2021-03/2021

**InSAR Processing and Volcano Deformation Modeling (online course), Professor.** National University of Cuyo (UNCUYO), Mendoza (ARG).

08/2020-07/2021

**Applied Geomatics in Distance Education Program Professor assistant.** Mario Gulich Institute (CONAE), Córdoba (ARG).

03/2019-03/2020

**Synthetic Aperture Radar, Professor.** Mario Gulich Institute (CONAE), Córdoba (ARG).

09/2019-09/2019

**Remote Sensing of Volcanic Eruptions course Professor's assistant.** Gulich Institute (CONAE), Córdoba (ARG).

07/2018-07/2018

**Geoserver and Publication of Spatial Databases as Web Services Professor.** Gulich Institute (COANE), Córdoba (ARG).

06/2018-06/2018

**Photogrammetry Applications Professor.** Gulich Institute (CONAE), Córdoba (ARG).

03/2018-03/2018

**Panoramic Epidemiology course Professor assistant.** Gulich Institute (CONAE). Córdoba (ARG).

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**HUMAN RESOURCES TRAINING**

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02/2018-2020

**Bachelor degree Thesis Co-supervisor.** University of Valle. Cali (COL). Thesis: "Identification of areas with wind energy potential in La Guajira department". Student: Yuly Andrea Muñoz López.

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**COURSES AND CERTIFICATES**

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01/08/2020 - 31/10/2020

**Python Programming (UNSAM)**

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<b>07/10/2020 - 16/10/2020</b>	<b>Images and Machine Learning in Python</b> (Gulich Institute, National University of Córdoba)
<b>03/08/2020 - 24/08/2020</b>	<b>Digital Satellite Imagery Processing</b> (Gulich Institute, National University of Córdoba)
<b>22/07/2019 - 26/07/2019</b>	<b>Geomorphometry</b> (Gulich Institute, National University of Córdoba)
<b>20/05/2019 - 24/05/2019</b>	<b>Radar Imaging Interferometry and Applications</b> (Gulich Institute, National University of Córdoba)

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## LANGUAGES AND SKILLS

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<b>Spanish</b>	<b>Native</b>
<b>English</b>	<b>Intermediate</b>
<b>IT-Applications</b>	<b>Python, R (Basic), Javascript (Basic), Latex, QGIS, ArcGIS, ERDAS, ENVI, SNAP.</b>

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## AWARDS AND GRANTS

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<b>2018</b>	<b>National Scientific and Technical Research Council (CONICET) Doctoral Studies Grant.</b> Córdoba (ARG)
<b>2016</b>	<b>Research Promotion, Technological Development and Innovation National Agency, Research Grant.</b> National University of Río Negro, Bariloche (ARG)
<b>2014</b>	<b>National Commission of Space Activities (CONAE) Master Studies Grant.</b> National University of Córdoba, Córdoba (ARG)

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## PARTICIPATION TO CONFERENCES

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Lighezzolo, Rafael & Martina, Agustín & Zigarán, Gonzalo & Lopez, Andrés & Solarte, Andrés & Aguirre, Exequiel & Rodriguez, Andrés. (2019). Free software libraries for geoprocessing and vector statistics of meteorological satellite data. 10.1109/RPIC.2019.8882177.

Seppi, Santiago & Solarte, Andrés & Roa, Yenni & Euillades, Leonardo & Gaute, Matias. (2021). On the feasibility of applying orbital corrections to saocom-1 data with Free Open Source Software (FOSS) to generate digital surface models: a case study in Argentina. 10.5194/isprs-archives-XLVI-4-W2-2021-167-2021.

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## SCIENTIFIC PRODUCTION

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Brasca Merlin, Almendra & Solarte, Andrés & Bellis, Laura & Carignano, Claudio & Cioccale, Marcela & Delgado, Manuel & Scavuzzo, Carlos & Arganaraz, Juan. (2021). DInSAR and statistical modeling to assess landslides: The case study of Sierras Chicas (central

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Argentina). Journal of South American Earth Sciences. 108. 103179. 10.1016/j.jsames.2021.103179.

Roa, Yenni & Rosell, Patricia & Solarte Andrés & Euillades, Leonardo & Carballo, Federico & García, Sebastián & Euillades, Pablo. (2020). First assessment of the interferometric capabilities of SAOCOM-1A: New results over the Domuyo Volcano, Neuquén Argentina. Journal of South American Earth Sciences. 106. 102882. 10.1016/j.jsames.2020.102882.

Guozden, Tomas & Carbajal, Juan & Bianchi, Emilio & Solarte, Andrés. (2020). Optimized Balance Between Electricity Load and Wind-Solar Energy Production. Frontiers in Energy Research. 8. 16.10.3389/fenrg.2020.00016.

Bianchi, E., Villalba, R. & Solarte, A. (2020). NDVI Spatio-temporal Patterns and Climatic Controls Over Northern Patagonia. Ecosystems 23, 84–97. <https://doi.org/10.1007/s10021-019-00389-3>

Bianchi, Emilio & Solarte Andrés & Guozden, Tomas. (2019). Spatiotemporal variability of the wind power resource in Argentina and Uruguay. Wind Energy, 10.1002/we.2342.

Guozden, Tomas & Bianchi, Emilio & Solarte, Andrés & Mulleady, Cristobal. (2017). Wind Resource Assessment in the Río Negro Province (Patagonia Argentina) Using MERRA Reanalysis. Meteorologica.

Bianchi, Emilio & Solarte Andrés & Guozden, Tomas. (2017). Large scale climate drivers for wind resources in Southern South America. Renewable Energy, vol. 114.

Visto il D.P.R. 28 dicembre 2000, n. 445 concernente “T.U. delle disposizioni legislative e regolamentari in materia di documentazione amministrativa” e successive modifiche ed integrazioni;

Vista la Legge 12 novembre 2011, n. 183 ed in particolare l’art. 15 concernente le nuove disposizioni in materia di certificati e dichiarazioni sostitutive (\*);

Consapevole che, ai sensi dell’art.76 del DPR 445/2000, le dichiarazioni mendaci, la falsità negli atti e l’uso di atti falsi sono punite ai sensi del Codice penale e delle leggi speciali vigenti in materia, **dichiara sotto la propria responsabilità: che quanto dichiarato nel presente curriculum vitae et studiorum comprensivo delle informazioni sulla produzione scientifica corrisponde a verità**

*(\*) ai sensi dell’art. 15, comma 1 della Legge 12/11/2011, n. 183 le certificazioni rilasciate dalla P.A. in ordine a stati, qualità personali e fatti sono valide e utilizzabili solo nei rapporti tra privati; nei rapporti con gli Organi della Pubblica Amministrazione e i gestori di pubblici servizi, i certificati sono sempre sostituiti dalle dichiarazioni sostitutive di certificazione o dall’atto di notorietà di cui agli artt. 46 e 47 del DPR 445/2000*

Edinson Andrés Solarte Casanova  
June 12<sup>th</sup>, 2022

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