Dr. Cosijopii García García.

✉ Cosijopii.prof@gmail.com, https://orcid.org/0000-0002-6435-8592
in https://www.linkedin.com/in/cosijopii-garcia-garcia/ Phone: +52 9711505102

Education

Jan 2021 – Feb 2025	🔖 ***Instituto Nacional de Astrofísica, Óptica y Electrónica ,*** **San Andres Cholula , Puebla, México** *Doctor of Science in Computer Science.* Thesis title: **Automatic design of convolutional neural network architectures using Multiobjective Evolutionary Algorithms.**
Aug 2018 – Oct 2020	🔖 ***Instituto Nacional de Astrofísica, Óptica y Electrónica ,*** **San Andres Cholula , Puebla, Mexico** *Master of Science in Computer Science.* Thesis title: **A Cellular Evolutionary Algorithm To Tackle Constrained Multiobjective Optimization Problems.**
Oct 2012 – May 2018	🔖 ***Universidad del Istmo Campus Ixtepec***, **Ciudad Ixtepec, Oaxaca, Mexico.** *Bachelor's Degree in Informatics.* Thesis title: **Gender classification using anthropometric measurements, texture analysis and ANFIS architecture.**

Publications

1 **Garcia-Garcia**, **C.**, Derbel, B., Morales-Reyes, A., & Escalante, H. J. (2025). Speeding up the multi-objective nas through incremental learning. In L. Martínez-Villaseñor & G. Ochoa-Ruiz (Eds.), *Advances in soft computing* (pp. 3–15). Springer Nature Switzerland. 🔗 https://doi.org/10.1007/978-3-031-75543-9_1

2 **Garcia-Garcia**, **C.**, Morales-Reyes, A., & Escalante, H. J. (2024). Progressive self-supervised multi-objective nas for image classification. *International Conference on the Applications of Evolutionary Computation (Part of EvoStar), Aberystwyth, Wales, United Kingdom 3-5 April*, 180–195. 🔗 https://doi.org/10.1007/978-3-031-56855-8_11

3 **Garcia-Garcia**, **C.**, Morales-Reyes, A., & Escalante, H. J. (2023a). Continuous cartesian genetic programming based representation for multi-objective neural architecture search. *Applied Soft Computing*, *147*, 110788. 🔗 https://doi.org/https://doi.org/10.1016/j.asoc.2023.110788

4 **Garcia-Garcia**, **C.**, Morales-Reyes, A., & Escalante, H. J. (2023b). Continuous Cartesian Genetic Programming based representation for Multi-Objective Neural Architecture Search for Image Classification [Poster Presentation]. *Computer Vision and Pattern Recognition Conference: LatinX in AI (LXAI) Research Workshop 2023, Vancouver, Canada*. 🔗 https://research.latinxinai.org/papers/cvpr/2023/pdf/Cosijopii_Garcia.pdf

5 **Garcia-Garcia**, **C.**, Escalante, H. J., & Morales-Reyes, A. (2022). CGP-NAS: Real-based solutions encoding for multi-objective evolutionary neural architecture search. *Genetic and Evolutionary Computation Conference Companion (GECCO '22 Companion), July 9–13, 2022, Boston, MA, USA*, *1*. 🔗 https://doi.org/10.1145/3520304

6 **Garcia-Garcia**, **C.** (2022). *Automatic design of convolutional neural network architectures using multiobjective evolutionary algorithms* (tech. rep.). INAOE. 🔗 https://ccc.inaoep.mx/archivos/2021/CCC-22-006.pdf

7 **Garcia-Garcia**, **C.**, Martínez-Peñaloza, M.-G., & Morales-Reyes, A. (2020). cMOGA/D: a novel cellular GA based on decomposition to tackle constrained multiobjetive problems. *In Genetic and Evolutionary*

Computation Conference Companion (GECCO '20 Companion), 9.
🔗 https://doi.org/10.1145/3377929.3398137

8 Meléndez Acosta, N. J., Solano Monje, R., **Garcia-Garcia, C.**, & Riós Figueroa, H. V. (2019). Ca-PSO: Coulomb attracting Particle Swarms. *Programación Matemática y Software, ISSN :2007-3283, 3*, 11.
🔗 https://doi.org/doi.org/10.30973/progmat/2019.11.3/1

9 Solano Monje, R., Meléndez Acosta, N. J., **Garcia-Garcia, C.**, & Riós Figueroa, H. V. (2018). C-PSO: Particle Swarm Optimization by Embedding Coulomb's Law. *COMIA*, 12.
🔗 https://doi.org/10.13053/rcs-147-8-24

10 **Garcia-Garcia, C.**, & Meléndez Acosta, N. J. (2017). Clasificación de género utilizando medidas antropométricas, análisis de texturas y la arquitectura ANFIS. *Advances in Social Informatics and its Applications, 136*, 33–46. 🔗 https://doi.org/10.13053/rcs-136-1-3

Experience

October 2024 – Now   🔖 **Associate Professor** Universidad del Istmo Campus Ixtepec, Ciudad Ixtepec, Oaxaca, Mexico.
Responsibilities include conducting research activities and delivering lectures.

Nov 2023 – Apr 2024   🔖 **Research Fellowship - Internship.** The French national research institute for digital science and technology (INRIA), Lille, hauts-de-france, France.

Jan 2023 – May 2023   🔖 **Computational inteligence course assistant.** Instituto Nacional de Astrofísica, Óptica y Electrónica, San Andres Cholula,, Puebla, México.

Jul 2016 – Dec 2016   🔖 **Software development intern.** EFACEC sistemas de España, S.L. Juchitán de Zaragoza, Oaxaca, México.

Tutorial Instructor

7 Nov 2024   🔖 *Quinta Semana Temática de Ingeniería en Sistemas Computacionales (Inteligencia Artificial).*
Tutorial: Introducción al Cómputo Evolutivo en Python.
Veracruz, México.

26 Sep 2022   🔖 *X Seminario y Escuela Nacional de Aprendizaje e Inteligencia Computacional.*
Tutorial: Evolutionary Computation in Python: Open Source Frameworks.
Puebla, Mexico.

24 Aug 2022   🔖 **IEEE Mexican international conference in computer science 2022.**
Tutorial: An introduction to genetic algorithms and their implementation with open source frameworks.
Xalapa, Mexico.

Volunteer

Jan 2021 – Jan 2022   🔖 **Organizing Committee Member. Web Developer** Meeting On Artificial Intelligence And Its Applications (RIIAA in spanish), Mexico City, Mexico City.

Honors and Scholarships

Nov 2023 – April 2024   ❚ **MOBLILEX scholarship**
Research intership Centre Inria de l'Université de Lille, Lille, hauts-de-france, France.

May 2022 – Present   ❚ **Invited reviewer**
Swarm and Evolutionary Computation Journal

Dec 2021 – Jan 2024   ❚ **Student Council Representative**
Computer Science Departament: Scientific diffusion events, induction of new students and meeting events. Instituto Nacional de Astrofísica, Óptica y Electrónica, Noviembre, San Andres Cholula, Puebla, México.

May 2021 – Dec 2024   ❚ **CONACYT scholarship**
Doctor in science degree. Instituto Nacional de Astrofísica, Óptica y Electrónica, Noviembre, San Andres Cholula, Puebla, México.

Aug 2018 – Aug 2020   ❚ **CONACYT scholarship**
Master in science Degree. Instituto Nacional de Astrofísica, Óptica y Electrónica, Noviembre, San Andres Cholula, Puebla, México.

Skills

Languages   ❚ Reading, writing and oral expression in English, Native Spanish.

Software Development   ❚ Python, Java, C, Matlab, JavaScript, SQL, Docker, Git. LaTeX, MATLAB.

Seminars and congresses

2024   ❚ **Seminario Nacional en Deep Learning, AutoML y sus aplicaciones**, CIMAT, Ciudad Apodaca, Nuevo León, México, November. (**Speaker**).

❚ **23rd Mexican International Conference on Artificial Intelligence**, INAOE, Tonantzintla, Puebla, México October. (**Full Paper presenter**).

❚ **27th International Conference on the Applications of Evolutionary Computation Part of Evostar Conference**, Aberystwyth University, Aberystwyth, Wales, United Kingdom. April. (**Full Paper presenter**).

2023   ❚ **5a. Edición de Escuela de Otoño en Sistemas Distribuidos y Redes de Próxima Generación**, October 2023, INAOE, Tonantzintla, Puebla.

❚ **LatinX in AI (LXAI) Research Workshop 2023 / The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2023**, Vancouver Convention Center, Vancouver, Canada. June. (**Extend abstract presenter**).

Seminars and congresses (continued)

2022   **MUFRAMEX 2nd Thematic School on Deep Generative Models**, Centro de Investigación en Matemáticas (CIMAT), Guanajuato, Mexico. November.

   GECCO 2022: Genetic and Evolutionary Computation Conference, Hybrid event, Boston Massachusetts, USA. July (**Poster presenter**).

2021   **GECCO 2021: Genetic and Evolutionary Computation Conference**, Electronic event July

2020   **Thirty-fourth Conference on Neural Information Processing Systems (NeurIPS)**, Electronic event. December

   1er. Congreso Internacional en Informática y Ciencias de la Computación, Electronic event. December

   8° Seminario nacional de aprendizaje e inteligencia computacional (SNAIC), Electronic event. October

   3rd Edition of the International Meeting on Artificial Intelligence and its Applications (RIIAA), Electronic event. August

   GECCO 2020: Genetic and Evolutionary Computation Conference, July, Cancún, Quintana Roo, (**Full Paper workshop presenter**).