

Nicolás Rojas-Morales

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Academic in Universidad Técnica Federico Santa María

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Profession

- 2013 **Computer Science Engineer**, *Universidad Técnica Federico Santa María*, Valparaíso, Chile.

Education

- 2014 - 2018 **PhD Degree**, *Thesis: "Opposite Learning Strategies for Improving the Search Process of Ant-based Algorithms"*, Supervisor: María-Cristina Riff Rojas.
Universidad Técnica Federico Santa María, Valparaíso, Chile
- 2013 - 2014 **Master Degree**, *Thesis: "New components inspired in music for Harmony Search"*, Supervisor: María-Cristina Riff Rojas.
Universidad Técnica Federico Santa María, Valparaíso, Chile

Published Journals

- 2025 **Analyzing the parameter search process of evolutionary calibrator using search trajectory networks**, Nicolás Rojas-Morales, Elizabeth Montero, Nicolás Toro, Gabriela Ochoa, *Applied Sciences, Annals of Operations Research*, 1-24, Springer US
- 2025 **Parameter Prediction for Metaheuristic Algorithms Solving Routing Problem Instances Using Machine Learning**, Tomás Barros-Everett, Elizabeth Montero, Nicolás Rojas-Morales, *Applied Sciences*, 15 (6), 2946, MDPI

- 2023 **Using a Classifier Ensemble for Preventing Burnout in University Students: a study case in Valparaíso**, Gonzalo Larraín, Nicolás Rojas-Morales, Daniel Olcay & Nicolás Gonzalez, 116235-116254 (11), 10.1109/ACCESS.2023.3325785, IEEE Access
- 2023 **Opposite scoring: focusing the tuning process of evolutionary calibrator**, Nicolás Rojas-Morales, María Cristina Riff, Neural Computing and Applications, 2023/1/25, Springer London
- 2022 **A Track-Based Conference Scheduling Problem**, Fabián Riquelme, Elizabeth Montero, Leslie Pérez-Cáceres, Nicolás Rojas-Morales, Mathematics 10 (21), 3976, Multidisciplinary Digital Publishing Institute
- 2022 **High Frequency and Dynamic Pairs Trading optimized with Ant Colony Optimization**, Jose Miguel Cerda & Nicolás Rojas-Morales & Marcel C. Minutolo & Werner Kristjanpoller, Computational Economics, Vol. 59, Pág. 1251-1275, Springer US
- 2021 **Opposition-Inspired synergy in sub-colonies of ants: The case of Focused Ant Solver**, Nicolás Rojas-Morales & María-Cristina Riff Rojas & Elizabeth Montero, 10.1016/j.knosys.2021.107341, Knowledge-Based Systems, Elsevier
- 2021 **Learning and focusing strategies to improve ACO that solves CSP**, Nicolás Rojas-Morales & María-Cristina Riff Rojas & Bertrand Neveu, 10.1016/j.engappai.2021.104408, Engineering Applications of Artificial Intelligence, Elsevier
- 2020 **A Survey and a Classification of Recent Approaches to Solve the Google Machine Reassignment Problem**, Darío Canales & Nicolás Rojas-Morales & María-Cristina Riff Rojas, IEEE Access, Vol. 8, 88815 - 88829, 2020.
- 2018 **Tuners review: How crucial are set-up values to find effective parameter values?**, Elizabeth Montero & María-Cristina Riff Rojas & Nicolás Rojas-Morales, Engineering Applications of Artificial Intelligence, 76, 108-118, 2018.
- 2017 **A survey and classification of Opposition-Based Metaheuristics**, Nicolás Rojas-Morales & María-Cristina Riff Rojas & Elizabeth Montero Ureta, Computers & Industrial Engineering, pages 424 - 435, Vol 110, 2017.
- 2017 **Improving harmony search algorithms by using tonal variation: the case of Sudoku and MKP**, Nicolás Rojas-Morales & María-Cristina Riff Rojas, Connection Science, pages 1 - 27, 2017.

Publications

- 2025 **A Search Trajectory Networks Model to Understand irace**, Pablo Estobar, Nicolás Rojas-Morales, Diana Gil-Silvestre, Gabriela Ochoa, Proceedings of the 2025 Genetic and Evolutionary Computation Conference, 10.1145/3712255.3726661, ACM.
- 2025 **Automated Selection and Ordering of Clip Sequences for Music Videos based on Tonal Tension and Visual Features**, Nicolás Rojas-Morales, evo*2025 EvoMUSART Proceedings.
- 2024 **Understanding Search Trajectories in Parameter Tuning**, María-Inés Riveros, Nicolás Rojas-Morales, Elizabeth Montero, Gabriela Ochoa, Proceedings of the 2024 Genetic and Evolutionary Computation Conference, GECCO, ACM.
- 2022 **Towards a Classifier Ensemble to prevent Burnout Syndrome on University Students**, Gonzalo Larraín, Nicolás Rojas-Morales, Daniel Olcay Jeneral & Nicolás Gonzalez Rogél , 2022 41st International Conference of the Chilean Computer Science Society, IEEE, 10.1109/SCCC57464.2022.10000313
- 2022 **Opposition-Inspired Strategies for Tabu Search approaches proposed for Knapsack Problems**, Victoria Miranda & Nicolás Rojas-Morales, 2022 IEEE Congress on Evolutionary Computation, IEEE, 10.1109/CEC55065.2022.9870266
- 2021 **Reducing the effort of Evolutionary Calibrator Using Opposite Information**, Nicolás Rojas-Morales, María Cristina Riff, 2021 IEEE Latin American Conference on Computational Intelligence.
- 2021 **An Ant based approach to solve the Electric Vehicle Routing Problem with Time Windows and Partial Recharges**, Andrés Huerta-Rojo, Elizabeth Montero, Nicolás Rojas-Morales, SCCC 2021 - 40th International Conference of the Chilean Computer Science Society.
- 2020 **Modelling Parameter Configuration Spaces with Local Optima Networks**, German Treimun-Costa, Elizabeth Montero, Gabriela Ochoa, Nicolás Rojas-Morales, Proceedings of the 2020 Genetic and Evolutionary Computation Conference, GECCO, Pages 751–759, ACM.
- 2020 **A Practical Tuner Based on Opposite Information**, Nicolás Rojas-Morales & María-Cristina Riff Rojas, 2020 IEEE Congress on Evolutionary Computation, CEC, 10.1109/CEC48606.2020.9185746, IEEE.
- 2018 **A Cooperative Opposite-Inspired Learning Strategy for Ant-based Algorithms**, Nicolás Rojas-Morales & María-Cristina Riff Rojas & Carlos A. Coello Coello, Eleventh International Conference on Swarm Intelligence, ANTS 2018, pages 317–324, Rome, Italy, Springer LNCS Series.

- 2018 **Feasibility and Availability based Heuristics for ACO algorithms solving Binary CSP**, Nicolás Rojas-Morales & María-Cristina Riff Rojas & Bertrand Neveu, 2018 IEEE Congress on Evolutionary Computation, CEC 2018, 10.1109/CEC.2018.8477747, Rio de Janeiro, Brazil, IEEE.
- 2017 **An Overview of Weighted and Unconstrained Scalarizing Functions**, Miriam Pescador-Rojas & Raquel Hernández Gómez & Carlos A. Coello Coello & Nicolás Rojas-Morales & María-Cristina Riff Rojas & Elizabeth Montero Ureta, International Conference on Evolutionary Multi-Criterion Optimization, pages 499 -513, 2017.
- 2016 **Ants can Learn from the Opposite**, Nicolás Rojas-Morales & María-Cristina Riff Rojas & Elizabeth Montero Ureta, Proceedings of the Companion Publication of the 2016 Annual Conference on Genetic and Evolutionary Computation, GECCO 2016, pages 389-396, Denver, USA, ACM.
- 2016 **Learning from the opposite: Strategies for Ants that solve MKP**, Nicolás Rojas-Morales & María-Cristina Riff Rojas & Elizabeth Montero Ureta, 2016 IEEE Congress on Evolutionary Computation, CEC 2016, pages 193-200, Vancouver, Canada, IEEE.
- 2015 **Using Anti-pheromone to Identify Core Objects for Multidimensional Knapsack Problems: A Two-step Ants based Approach**, Nicolás Rojas Morales & María-Cristina Riff Rojas & Elizabeth Montero Ureta, Proceedings of the Companion Publication of the 2015 Annual Conference on Genetic and Evolutionary Computation, GECCO 2015, pages 1469-1470, Madrid, Spain, ACM.
- 2015 **Google challenge: A hyperheuristic for the Machine Reassignment problem**, Rodolfo Hoffmann Letelier & María-Cristina Riff Rojas & Elizabeth Montero Ureta & Nicolás Rojas Morales, 2015 IEEE Congress on Evolutionary Computation, CEC 2015, pages 846-853, Sendai, Japan, IEEE.
- 2013 **Including Modal Improvisation and Music-Inspired Components to Improve Harmony Search**, Nicolás Rojas Morales & María-Cristina Riff Rojas, Proceedings of the 12th Mexican International Conference on Artificial Intelligence, Part II, MICAI 2013, pages 105-117, Mexico City, Mexico, Lecture Notes in Computer Science, Springer.
- 2013 **New Components with on-line Control to Improve Harmony Search**, Nicolás Rojas, María-Cristina Riff, Xavier Bonnaire, & Elizabeth Montero, Proceedings of the IEEE International Conference on Computer and Information Technology, CIT 2013, pages 538-544, Sydney, Australia, IEEE.

Projects - Principal Investigator

- March 2023 - **Learning Strategies to Enhance Tuners Applied To Nature-Inspired Algorithms**, Fondo Nacional de Desarrollo Científico y Tecnológico de Iniciación en Investigación 2023, No. 11230748, Chile.
- March 2026
- July 2022 - **Estrategias de Aprendizaje para Mejorar Sintonizadores de Parámetros aplicados a Algoritmos Bio-Inspirados**, Initiation into Research USM December 2023 PI_LII_2022_3, Valparaíso, Chile.
- March 2020 - **Learning from Tuning: An Opposite-inspired strategy for problem solving**, Initiation into Research USM January 2022 PI_LII_2020_8, Valparaíso, Chile.

Projects Participation

- 2025 **Enhancing research in Algebraic Geometry with Artificial Intelligence**, Fondo Nacional de Desarrollo Científico y Tecnológico de Exploración 2025, No. 13250049, Chile.
- 2025 **Desarrollo de plataforma tecnológica para la gestión de riesgo de desastres (GRD) en zonas y sitios patrimoniales**, FONDEF IDeA I+D 2025 2025, No. ID25I10257, Chile.
- 2022 - 2023 CORFO InnovaRegión Project N. 22IR215189, Nicolás Gonzalez Rogél, Chile.
- 2021 - 2022 CORFO Crea & Valida Project N. 21CV171738, Nicolás Gonzalez Rogél, Chile.
- 2020 - 2022 Regular FONDECYT 1200126, María-Cristina Riff, Chile.
- 2015-2018 **Designing efficient tuning algorithms with learning**, Initiation into Research FONDECYT 11150787, Elizabeth Montero, Chile.
- 2015-2018 **Increasing The Life Of Heuristic-Based Algorithms For Dynamic Optimization With Learning**, Regular FONDECYT 1151456, María-Cristina Riff, Chile.

Ethical Committee Approved Projects

- September 2023 Application of Human Place Project in Universidad Técnica Federico Santa María, Computer Science Department, by Universidad de Santiago Ethical Committee - Ethical Report N.527/2023

Conferences

- 2021 **Reducing the effort of Evolutionary Calibrator Using Opposite Information**, Nicolás Rojas-Morales & María-Cristina Riff Rojas, IEEE Latin American Conference on Computational Intelligence, LACCI 2021, Chile

- 2018 **Including an Opposite-Inspired Strategy to improve Focused Ant Solver for solving CSP**, Nicolás Rojas-Morales & María-Cristina Riff Rojas, XIX Latin-Iberoamerican Conference on Operations Research, CLAIO 2018, Lima, Perú.
- 2017 **Collaborative Opposite Strategies for HS: The case of MKP**, Nicolás Rojas-Morales & María-Cristina Riff Rojas & Elizabeth Montero, OPTIMA 2017, Viña del Mar, Chile.
- 2016 **Learning from explicit opposite based computing for Ants Algorithms**, Nicolás Rojas-Morales & María-Cristina Riff Rojas & Elizabeth Montero, CLAIO 2016, Santiago, Chile.
- 2014 **Strategies to Design Life-Long Learning Heuristic Based Algorithms**, Nicolás Rojas Morales & María-Cristina Riff Rojas, Doctoral Consortium - IJCAI 2014, Buenos Aires, Argentina.
- 2014 **Improving Harmony Search Algorithm that solves Sudoku**, Nicolás Rojas Morales & María-Cristina Riff Rojas, ALIO/EURO 2014, Montevideo, Uruguay.

Professional Experience

- March 2024- **Academic**, *Computer Science Department*, Universidad Técnica Federico Santa
Now María, Casa Central, Valparaíso, Chile.
- September **Young Researcher**, *Computer Science Departament & Dirección General de*
2018 - *Investigación, Innovación y Postgrado*, Universidad Técnica Federico Santa
January 2024 María, Casa Central, Valparaíso, Chile.
- June 2013 - **Software Development**, *Agile Ingeniería & Consultoría*, Valparaíso - Santiago.
January 2014
- October 2012 **Training**, *Agile Ingeniería & Consultoría*, Valparaíso - Santiago.
- June 2013
- January 2011 **Training**, *Codelco Chile*, Rancagua, Codelco División el Teniente, Rancagua.
- February
2011

Teaching Experience

- August- **Lecturer**, *Universidad Técnica Federico Santa María, Casa Central*, Valparaíso,
December Chile, Automata Theory and Formal Languages.
2025
- March - July **Lecturer**, *Universidad Técnica Federico Santa María, Casa Central*, Valparaíso,
2025 Chile, Automata Theory and Formal Languages.

- March - July 2025 **Lecturer - Master**, *Universidad Técnica Federico Santa María, Campus San Joaquín and Casa Central, Santiago/Valparaíso, Chile, Creative Computing.*
- August - December 2024 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín and Casa Central, Santiago/Valparaíso, Chile, Creative Computing.*
- March - July 2024 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Artificial Intelligence.*
- March - July 2024 **Lecturer**, *Universidad Técnica Federico Santa María, Casa Central, Valparaíso, Chile, Operations Research.*
- August - December 2023 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Artificial Intelligence.*
- March - July 2023 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Artificial Intelligence.*
- March - July 2023 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Operations Research.*
- August - December 2022 **Lecturer - Master**, *Universidad Técnica Federico Santa María, Casa Central, Valparaíso, Chile, Advanced Topics on Artificial Intelligence.*
- August - December 2022 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Artificial Intelligence.*
- March - July 2022 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Artificial Intelligence.*
- March - July 2022 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Operations Research.*
- August - December 2021 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Artificial Intelligence.*
- April - August 2021 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Artificial Intelligence.*
- April - August 2021 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Operations Research.*
- April - August 2020 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Advanced Artificial Intelligence.*
- April - August 2020 **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín, Santiago, Chile, Operations Research.*

- March - **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín*,
August 2019 Santiago, Chile, Advanced Artificial Intelligence.
- March - **Lecturer**, *Universidad Técnica Federico Santa María, Campus San Joaquín*,
August 2019 Santiago, Chile, Operations Research.
- September - **Lecturer**, *Universidad Técnica Federico Santa María, Casa Central*, Valparaíso,
December 2018 Chile, Advanced Artificial Intelligence.
- September - **Lecturer**, *Universidad Técnica Federico Santa María, Casa Central*, Valparaíso,
December 2018 Chile, Optimization.
- March - **Lecturer**, *Universidad Técnica Federico Santa María, Casa Central*, Valparaíso,
August 2018 Chile, Operations Research.
- March - July **Lecturer**, *Universidad Técnica Federico Santa María, Casa Central*, Valparaíso,
2017 Chile, Operations Research II.
- March - July **Lecturer**, *Universidad Técnica Federico Santa María, San Joaquín*, Santiago,
2017 Chile, Operations Research II.
- March - July **Lecturer**, *Universidad Técnica Federico Santa María, San Joaquín*, Santiago,
2016 Chile, Operations Research II.
- March - July **Lecturer**, *Universidad Técnica Federico Santa María, San Joaquín*, Santiago,
2015 Chile, Operations Research II.
- March - July **Lecturer**, *Universidad Técnica Federico Santa María, San Joaquín*, Santiago,
2014 Chile, Operations Research II.

Internships

- January 2018 **Ecole des Ponts**, *Paris*, France.
- February 2018
- November **CINVESTAV**, *México City*, México.
2017
- June 2016 **CINVESTAV**, *México City*, México.

Workshops

- February 09, **Desde la Optimización al Arte: El uso de Metaheurísticas**, *Nicolás Rojas-Morales & Sebastian Valdovinos, HUBMusical - Festival de Nuevos Medios, Artes Visuales y Tecnología*, Valparaíso, Chile.
2023

Invited Talks

- November 24, 2022 **Opposition-Inspired Synergy in Sub-colonies of ants: The case of Focused Ant Solver**, *Lo Mejor de lo Nuestro 2022, Jornadas Chilenas de la Computación*, Santiago, Chile.
- November 18, 2020 **Modelling Parameter with Local Optima Configuration Networks Spaces**, *Lo Mejor de lo Nuestro 2020, Jornadas Chilenas de la Computación*, Coquimbo, Chile.
- November 6, 2019 **A survey and classification of Opposition-Based Metaheuristics**, *Lo Mejor de lo Nuestro 2019, Jornadas Chilenas de la Computación*, Concepción, Chile.
- January 9, 2018 **Opposite Learning strategies to Focus the Search Process of Metaheuristics**, *IRIDIA*, Université Libre de Bruxelles, Bruselas, Bélgica.
- November 16, 2017 **Opposite Learning strategies to Focus the Search Process of Metaheuristics**, *CINVESTAV*, Mexico City, Mexico.
- October 18, 2017 **Ants can learn from the opposite**, *Lo Mejor de lo Nuestro 2017, Jornadas Chilenas de la Computación*, Arica, Chile.
- June 23, 2016 **Learning from the Opposite**, *CINVESTAV*, Mexico City, Mexico.
- July 6, 2015 **Using Anti-pheromone to Identify Core Objects for Mutidimensional Knapsack Problems: A Two-step Ants based Approach**, *Geneura Team*, Universidad de Granada, Spain.

Teaching Awards

- 2024 **Maestro Destacado**, *Universidad Técnica Federico Santa María*, Santiago - Chile.
- 2023 **Maestro Destacado**, *Universidad Técnica Federico Santa María*, Santiago - Chile.
- 2021 **Maestro Destacado**, *Universidad Técnica Federico Santa María*, Santiago - Chile.
- 2020 **Maestro Destacado**, *Universidad Técnica Federico Santa María*, Santiago - Chile.
- 2019 **Maestro de Excelencia**, *Universidad Técnica Federico Santa María*, Santiago - Chile.

Diploma

- June 2023 - **DEFIE 2023**, *Estrategias Formativas para la Innovación y Emprendimiento (In progress)*, UTFSM Valparaíso, Chile.
- Now

Training

- 2016 **Training**, *Centro de Innovación para la Calidad Educativa - CICE 105: Evaluación*, UTFSM Valparaíso, Chile.

Academic Awards

- 2018 **National Fellowship for Ph.D students to Attend Conferences**, *Comisión Nacional de Investigación Científica y Tecnológica - CONICYT*, Chile.
- 2016 **Student Travel Grant**, *IEEE CEC 2016*, Vancouver, Canada.
- 2016 **Student Travel Grant**, *SIGEVO GECCO 2016*, Denver, USA.
- 2015 **Student Travel Grant**, *SIGEVO GECCO 2015*, Madrid, Spain.
- 2015 - 2018 **Fellowship for Ph.D students**, *Comisión Nacional de Investigación Científica y Tecnológica - CONICYT*, Chile.
- 2014 **Fellowship for Ph.D students**, *Universidad Técnica Federico Santa María*, Valparaíso.
- 2014 **Fellowship for IJCAI School - Doctoral Consortium**, *Lodging, Flying tickets and Courses*, Universidad de Palermo, Buenos Aires, Argentina.
- 2013 **Fellowship for Master students**, *Universidad Técnica Federico Santa María*, Valparaíso.

Reviews for International Journals

- 2025 **Engineering Applications of Artificial Intelligence**, *Elsevier*, August 2025.
- 2024 **Evolutionary Intelligence**, *Springer*, April 2024.
- 2024 **IEEE Access**, *IEEE*, March 2024.
- 2023 **The Journal of Supercomputing**, *Springer*, February & May 2023.

Reviews for Conferences

- 2026 **ANTS 2026**, *15th International Conference on Swarm Intelligence*, June 8th-10th, 2026.
- 2025 **Genetic and Evolutionary Computation Conference 2025**, *Tracks: Evolutionary Multiobjective Optimization, Neuroevolution, and Genetic Algorithms*, July 14th-18th, 2025.
- 2024 **Genetic and Evolutionary Computation Conference 2024**, *Track: Genetic Algorithms*, July 14th-18th, 2024.
- 2023 **Jornadas Chilenas de Computación 2023**, *Track: Encuentro de Tesis*, October 23th-26th, 2023.

- 2023 **Genetic and Evolutionary Computation Conference 2023**, *Track: Genetic Algorithms*, July 15th-19th, 2023.
- 2022 **Jornadas Chilenas de la Computación 2022**, *Track: Lo Mejor de lo Nuestro*, November 21th-25th, 2021.
- 2022 **Genetic and Evolutionary Computation Conference 2022**, *Track: Genetic Algorithms*, July 9th-13th, 2022.
- 2021 **Jornadas Chilenas de la Computación 2021**, *Track: Lo Mejor de lo Nuestro*, November 15th-19th, 2021.
- 2021 **Genetic and Evolutionary Computation Conference 2021**, *Track: Genetic Algorithms and Evolutionary Combinatorial Optimization and Metaheuristics*, July 10th-14th, 2021.
- 2020 **Genetic and Evolutionary Computation Conference 2020**, *Track: Evolutionary Combinatorial Optimization and Metaheuristics*, July 8th-12th, 2020.

Reviews for Projects

- 2025 **Reviewer**, *Fondecyt Research Initiation Project Competition 2026*, ENGINEERING 2 Group, National Research and Development Agency (ANID).
- 2023 **Reviewer**, *Fondecyt Research Initiation Project Competition 2024*, ENGINEERING 2 Group, National Research and Development Agency (ANID).
- 2017 **External Reviewer**, *“Concurso Regular de Investigación de la Universidad de Playa Ancha”*, Valparaíso.

Co-supervised Master Degree

- 2023 **“Newspaper Magnification Preserving Entry Points and Optimizing Aesthetics: A Computational Approach of Layouting using an Evolutionary Algorithm”**, *Sebastián Gallardo Díaz*, Master in Computer Science Engineering, Universidad Técnica Federico Santa María.
Valparaíso
- 2019 **“Pairs Trading de Alta Frecuencia y Dinámico Optimizado con Optimización de Colonia de Hormigas”**, *Jose Cerda*, Master in Industrial Engineering, Universidad Técnica Federico Santa María.
Valparaíso

Supervised Final Project Engineering Degree

- November 2023 **"Modelo Search Trajectory Network para Algoritmos de Optimización Basados en Colonias de Hormigas"**, *Pablo Estay Rehbein*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Valparaíso
- August 2023 **"Paralelización de un sintonizador de parámetros."**, *Esteban Barrios Araya*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- August 2023 **"Propuesta de diseño e implementación de una metaheurística para la resolución del problema de recogida, estabilización in situ y traslado de las víctimas durante desastres de gran escala."**, *Anastasiia Fedorova*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- March 2023 **"Análisis de espacios de parámetros de algoritmos meta-heurísticos usando redes trayectoriales."**, *María Inés Riveros*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- January 2023 **"Estudio de un problema de clasificación sobre la salud mental en estudiantes universitarios."**, *Gonzalo Larraín*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- December 2022 **"Diseño de una estrategia para obtener conocimiento en un sintonizador de parámetros"**, *Daniel Toro*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- September 2022 **"Diseño de un sintonizador de parámetros basado en un modelo predictivo de desempeño"**, *Felipe Olavarria*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- September 2022 **"Diseño de una estrategia inspirada en lo opuesto para un sintonizador de parámetros"**, *Vicente Manriquez*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- March 2022 **"Diseño de Técnicas Metaheurísticas para la resolución del Drone Delivery Problem"**, *Vicente Pacheco*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago

- January 2022 **“Diseño de Estrategias Opuestas para Tabu Search”**, *Victoria Miranda*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- June 2021 **“Diseño de una técnica metaheurística para el problema de Recolección de Leche con Mezcla y Selección”**, *Matías Moreno*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- In Progress **“Estudio de Gamificación en Aplicación Human Place”**, *Victor Morales A.*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Valparaíso
- In Progress **“Una técnica Metaheurística para el problema de Asignación Horaria para CIAC Casa Central”**, *Anghelo Carvajal C.*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Valparaíso
- In Progress **“Diseñar una librería de métricas de desempeño para metaheurísticas poblacionales”**, *Juan Pablo Cassis Oyanadel*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- In Progress **“MHTMetLib: A new library to measure the performance of trajectory metaheuristics”**, *Joaquín Andrés Gatica Hernández*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- In Progress **“Diseño e implementación de criterios de aceptación para la configuración automática de algoritmos utilizando iRACE”**, *Diana Gil Silvestre*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- In Progress **“Propuesta de framework metaheurístico para la resolución del Traveling Tournament Problem enfocado en el fútbol”**, *Vicente Andrés Balbontín Jara*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago
- In Progress **“Diseño e implementación de un Algoritmo Genético para reducción de dimensionalidad para optimizar un clasificador objetivo”**, *Nicolás Román*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María. Santiago

Co-supervised Final Project Engineering Degree

- 2019 **“Diseño e implementación de una plataforma web para la resolución de problemas con múltiples criterios”**, *Oscar Duarte Marín*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María.
Valparaíso
- 2018 **“Diseño e implementación de una API AHP para la toma de decisiones con múltiples criterios”**, *Daniel Quinteros Bueno*, Computer Science Engineer Degree, Universidad Técnica Federico Santa María.
Valparaíso

Affiliations

- IEEE **Member Number 92831766.**
ACM **Member Number 1833204.**

Languages

- Spanish: Mother Tongue
- English: Written and spoken

Interests

- Artificial Intelligence
- Operations Research
- Metaheuristics
- Optimisation

Other Interests

- Music Production - Composition
- Digital and analog photography