Melina Vidoni

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EDUCATION

MAIN EDUCATION

Doctor of Engineering, on Information Systems Engineering

Universidad Tecnológica Nacional, Facultad Regional Santa Fe *Category:* A-Class CONEAU Resolution No 1272/12. This is the highest class awarded for a graduate or post-graduate degree in Argentina.

Thesis Title: "Analysis, Characterization and Development of Advanced Planning Systems to Optimize Manufacturing Processes".

Advisors: Prof. Aldo Vecchietti, PhD. (Advisor); Prof. Marcelo Montagna, PhD (Co-Advisor)

Jury: Prof. Omar Chiotti, PhD.; Prof. Enrique Salomone, PhD.; Prof. Claudia Andrea Marcos, PhD.

Information Systems Engineering

Universidad Tecnológica Nacional, Facultad Regional Santa Fe

Category: A-Class CONEAU Resolution No 677/11. This is the highest class awarded for a graduate or post-graduate degree in Argentina.

Thesis Title: "Software Framework to Solve Industrial Planning and Scheduling Problems".

Advisors: Prof. Aldo Vecchietti, PhD. (Advisor); PhD. Analía Rodríguez (Co-Advisor). *Jury:* Prof. Omar Chiotti, PhD.; Prof. Pablo Villareal, PhD.; Prof. Rosa Galli, PhD.

Musical Training Cycle, with Musical Education Training

Escuela Nro. 9902, Centro Recreativo Estético Infantil (CREI).

Title: Able to teach music from kindergarten (2-3 years old), to primary level (11-12 years old). Had extensive training in pedagogy and music teaching.

March 2001 -December 2006

COMPLEMENTARY EDUCATION

Business Analysis Diploma

Universidad Tecnológica Nacional, Facultad Regional Buenos Aires *Approval Grade:* 93.2 / 100

Result: Approval

August 2017 - December 2017

Business Intelligence Diploma

Universidad Tecnológica Nacional, Facultad Regional Buenos Aires

Approval Grade: 88.1 / 100

Result: Approval

September 2017 - February 2018

April 2013 -September 2017

March 2007 -March 2013

TEACHING EXPERIENCE

COLLEGE TEACHING

Assistant Lecturer

Universidad Tecnológica Nacional, Facultad Regional Santa Fe School of Information Systems Engineering

Course: Database Management (Resolution No. 740/20187)

Responsibilities: Instructor on afternoon commission, with 60+ students. Led practical classrooms, teaching students to solve practical assignments. After joining, I was in charge of teaching a blind student that joined the course, creating special notations (i.e., when working with B and B+ Trees), correct his practical assignments and keep a different peace of teaching. I was also in charge of preparing an intensive NoSQL-oriented training for the other Lecturers and Senior Lecturers, as well as a short introductory session. I also take part in grading midterms and final-terms.

Evaluation: Very positive, through students' polls.

PhD Course Senior Lecturer

Universidad Tecnológica Nacional, Facultad Regional Santa Fe Postgraduate School

Course: Systems to Optimize Enterprise Operations (Resolution No. 1620) Responsibilities: Instructor for the course. Developed and directed a course to teach Advanced Planning Systems, with the perspective of Industry 4.0 and application limitations in Argentina. Lectured, researched study cases to use as Course Projects, and prepared assignments. I organized the course with a Project-Based Learning approach, using a running Course Project to be developed in groups. Lectured, advised students and graded them.

Evaluation: Currently ongoing.

Invited Lecturer

Universidad Tecnológica Nacional, Facultad Regional Santa Fe School of Information Systems Engineering

Course: Architecture-Based Software Design

Responsibilities: I personally approached Prof. Juan Carlos Ramos with a teaching proposal, related to my PhD. Thesis development. I designed a course using a Project-Based and Team-Based Learning approaches. I was in-charge of the lectures and workshops, acted as moderator during students' peer-review and brainstorming sessions, designed the Course Project, and advised students. The results of this approach are published in an academic journal.

Evaluation: Very Positive, through students' polls.

April 2018 -Present

April 2018 - Present

April 2016

COMMUNITY TEACHING

R-Ladies Workshops

Different venues, as part of R-Ladies Santa Fe Meetings

As organizer of an R-Ladies chapter in a small city, I've organized and lectured workshops about different topics related to R-Programming. R-Ladies is a group oriented to women and minority genders, aiming to create a safe space for programming and working in R. Many of these lectures are recorded and submitted

May 2018 - Present

to the group's YouTube channel.

Teaching Practices - Musical Education Training

School No. 1 Domingo Faustino Sarmiento Kindergarten and Primary School

Course: Music

Responsibilities: I organized lectures and taught in courses for different alumni, having between two and four lectures per level (kindergarten of 3-4 years, elementary and primary schools). In Primary School, I was the main teacher for a course unit, teaching traditional Argentinian music.

Evaluation: 9.36 / 10 (for Primary School course unit, graded by advisor).

March 2006 -September 2006

RESEARCH EXPERIENCE

Postdoctoral Scholarship

Institute of Design and Development (INGAR CONICET-UTN), National Council of Scientific and Technical Research

Location: Santa Fe, Argentina

Postdoctoral fulltime research scholarship conducted with Prof. Aldo Vecchietti. Novel approaches to introduce data science to optimize enterprise operations, taking into account a number of limitations of the country. Took part of different academy-industry exchanges, and worked with multidisciplinary teams.

April 2018 -Present

Research Fellow

Institute of Design and Development (INGAR CONICET-UTN), National Council of Scientific and Technical Research

Location: Santa Fe, Argentina

Doctoral thesis research conducted with Prof. Aldo Vecchietti and Prof. Marcelo Montagna. Pioneered a systemic approach to incorporate different optimization models into a specific type of decision support system. Demonstrated that many software engineering concepts can be ported and adapted into operational research.

April 2013 -March 2018

Research and Development Scholarship

Universidad Tecnológica Nacional, Facultad Regional Santa Fe. School of Information Systems Engineering

Location: Santa Fe, Argentina.

Undergraduate scholarship granted by academic record, to work with Prof. Aldo Vecchietti and Prof. Fernanda Golobisky in a research project. Developed a framework to translate UML diagrams into object-relational databases structures.

March 2010 -December 2012

MENTORING EXPERIENCES

MASTER THESIS

Information Technology Master, Universidad Nacional del Nordeste (UNNE) *Thesis Title:* "Development of an Institutional Regulation Database, for a College Academic Unit, Employing NoSQL Databases".

June 2018 – November 2019 (Proposed) Co-supervisor for Lic. Silvina Podestá, a master student. Mentored her through a project to develop a novel digital archive for the College's Academic Unit. This thesis is in progress.

Information Technology Master, Universidad Nacional del Nordeste (UNNE) *Thesis Title:* "Processing and Analysis of the Educational System Data Using NoSQL

Thesis Title: "Processing and Analysis of the Educational System Data Using NoSQI Databases"

Co-supervisor for Lic. Víctor Hugo Ruchinsky, a master student. Mentored him in the use of R and NoSQL databases, as part of the project to develop an innovative framework to share organize and share open data sourced from the Argentinian Educational System, as many provinces do not have similar tools.

June 2018 -December 2019 (Proposed)

Information Technology Master, Universidad Nacional del Nordeste (UNNE)

Thesis Title: "Framework Data Analysis and Prediction, Developed in R, in the Context of the Lottery Game, in the Province of Chaco"

Main Supervisor for Lic. Patricia Loto, a master student. Mentored her through the project to locate, extract, clean, organize and analyze data of the Lottery Game, a state-dependent organism. The goal is to create a framework for internal use, aimed to work as a decision support system.

June 2018 -December 2019 (Proposed)

PUBLICATIONS

ACADEMIC JOURNALS

Vidoni, M.; Vecchietti, A. "rsppfp: An R Package for the Shortest Path Problem with Forbidden Paths", *SoftwareX*, Vol.9C, 2019, p265-270. ISSN: 2352-7110. DOI: https://doi.org/10.1016/j.softx.2019.03.004

Vidoni, M., Montagna, J.M.; Vecchietti, A. "Project and Team-Based Strategies for Teaching Software Architecture", International Journal of Engineering Education (IJEE), Vol. 34 (5), 2018, pp1701-1708. ISSN: 0949-149X/9.

Vidoni, M.; Vecchietti, A. "A systemic approach to define and characterize Advanced Planning Systems (APS)", *Computers & Industrial Engineering*, Vol. 90, December 2015, p326-338, ISSN: 0360-8352, DOI: http://dx.doi.org/10.1016/j.cie.2015.10.006.

Vidoni, M.; Vecchietti, A. "An intelligent agent for ERP's data structure analysis based on ANSI/ISA-95 standard", *Computers in Industry*. Vol. 73, 2015, pp39-50. ISSN: 0166-3615. DOI: http://dx.doi.org/10.1016/j.compind.2015.07.011.

Vidoni, M.; Vecchietti, A. "Integración de modelos de planeamiento y scheduling en sistemas de información empresariales", *Iberoamerican Journal of Industrial Engineering*. Volume 5, issue 10, 2014, pp142-157. ISSN: 2175-8018.

- * Vidoni, M.; Montagna, J.M.; Vecchietti, A. "Analysis, Design and Development of Advanced Planning Systems (APS): A Reference Architecture", *INDERSCIENCE International Journal of Industrial and Systems Engineering*. <u>State</u>: Under revision.
- * Vidoni, M.; Vecchietti, A. "Agile Operational Research". *Journal of the Operational Research Society*. State: Under revision.

INTERNATIONAL CONFERENCES

Vidoni, M.; Cunico, L.; Vecchietti, A.; "An Empirical Framework to Applying Unit Testing in Operational Research", 48º International Conference on Computers & Industrial Engineering (CIE48). Auckland, New Zealand. 2018.

Vidoni, M.; Vecchietti, A. "Towards an R Package for the Shortest Path Problem with Forbidden Paths", Conferencia Latinoamericana sobre Uso de R en Investigación + Desarrollo (LatinR-2018), en 47º Jornadas de Informática e Investigación Operativa. Buenos Aires, Argentina. 2018. ISSN: 2618-3196, p57-58. URL: http://47jaiio.sadio.org.ar/sites/default/files/LatinR_32.pdf

Vidoni, M.; Cúnico, M.L.; Vecchietti, A. "Towards an Agile Lifecycle in Operations Research Projects", 20^o International Conference on Enterprise Information Systems (ICEIS). Funchal, Portugal. 2018. ISBN: 978-989-758-298-1, pp432-440, Vol. 1. DOI: http://dx.doi.org/10.5220/0006760504320440

Vidoni, M.; Montagna, J. M.; Vecchietti, A. "Improving the Assessment of Advanced Planning Systems by Including Optimization Experts' Knowledge", 19º International Conference on Enterprise Information Systems (ICEIS). Porto, Portugal. 2017. ISBN: 978-989-758-248-6, p510-517. Vol. 2. DOI: http://dx.doi.org/10.5220/0006362005100517

Vidoni, M.; Vecchietti, A. "Towards a Reference Architecture for Advanced Planning Systems", *18*^o *International Conference on Enterprise Information Systems (ICEIS)*. Rome, Italy. 2016, ISBN: 978-989-758-187-8, pp433-440, Vol. 1. DOI: http://dx.doi.org/10.5220/0006362005100517

ARGENTINIAN CONFERENCES

Vidoni, M.; Cúnico, M.L.; Vecchietti, A. "Los Métodos Ágiles como Propuesta para el Desarrollo de Modelos de Investigación Operativa", 6º Congreso Nacional de Ingeniería Informática y Sistemas de Información (CoNaIISI). Mar del Plata, Argentina. 2018. ISSN: 2347-0372. URL: http://drives.news/Conaiisi2018-Vidoni

Loto, P.; Cúnico, M.L.; Vidoni, M. "Estableciendo las Bases para el Análisis de Datos en la Lotería Chaqueña", 6º Congreso Nacional de Ingeniería Informática y Sistemas de Información (CoNaIISI). Mar del Plata, Argentina. 2018. ISSN: 2347-0372. URL: http://drives.news/Conaiisi2018-Loto

Ruchinsky, V.H.; Vidoni, M.; Golobisky, M.F. "Desafíos para Datos Educativos Abiertos en Argentina", 6º Congreso Nacional de Ingeniería Informática y Sistemas de Información (CoNaIISI). Mar del Plata, Argentina. 2018. ISSN: 2347-0372. URL: http://drives.news/Conaiisi2018-Ruchinsky

Vidoni, M.; Cúnico, M.L.; Vecchietti, A. "Una Contribución al Mantenimiento de Modelos en Investigación Operativa desde la Ingeniería del Software", 5º Congreso Nacional de Ingeniería Informática y Sistemas de Información (CoNaIISI). Santa Fe, Argentina. 2017. ISSN: 2347-0372, p.448-459. URL: http://conaiisi2017.frsf.utn.edu.ar/index.php/memorias/

Vidoni, M.; Montagna, J. M.; Vecchietti, A. "Evaluación de una Arquitectura de Referencia con Alumnos Avanzados de la Carrera Ingeniería en Sistemas de Información", 4º Congreso Nacional de Ingeniería Informática y Sistemas de Información (CoNaIISI). Salta, Argentina. 2016. ISSN: 2347-0372.

Vidoni, M.; Vecchietti, A., "Una Perspectiva de Ingeniería del Software para Definir Sistemas Avanzados de Planificación de Empresa", 44º JAIIO 4º Simposio de Informática Industrial. Rosario, Santa Fe, Argentina. 2015, ISSN 2451-7542, p49-62.

Vidoni, M.; Vecchietti, A., "Desarrollo de un Agente Inteligente Basado en el Estándar ANSI/ISA-95", 2º Congreso Nacional de Ingeniería Informática y Sistemas de Información (CoNaIISI). San Luis, Argentina. 2014, ISSN: 2346-9927, p47-59.

Vidoni, M.; Vecchietti, A., "Análisis de Adecuación de Bases de Datos al Estándar ANSI/ISA-95 Utilizando un Agente Inteligente", 43º JAIIO Simposio de Informática Industrial. Buenos Aires, Argentina. 2014, ISSN 2313-9102, p37-53.

Vidoni, M.; Vecchietti, A., "E2OL: Sistema de Planeamiento y Scheduling Personalizable e Integrable con ERPs", 1º Congreso Nacional de Ingeniería Informática y Sistemas de Información (CoNaIISI). Córdoba, Argentina. 2013, ISSN 2347-0372.

Vidoni, M.; Rodríguez, M. A.; Vecchietti, A. "Integración de Modelos de Planeamiento y Scheduling en Sistemas de Información Empresariales", 42º JAIIO Simposio de Informática Industrial. Córdoba, Argentina. 2013, ISSN 2313-9102, p274-286.

Vidoni, M.; Vecchietti, A. "Automatización del Diseño Lógico en Bases de Datos Objeto Relacionales". 41º JAIIO Concurso de Trabajos Estudiantiles. La Plata, Argentina. 2012, ISSN 1850-2946, p642-652.

SERVICE

Attached to this resume is Publons' verified record of peer-reviews.

PROGRAM AND ORGANIZATION COMMITTEES

21º International Conference on Enterprise Information Systems Program Committee Member: www.iceis.org/ProgramCommittee.aspx Revised Manuscripts: 6 (regular and position)	2018-2019
20º International Conference on Enterprise Information Systems Program Committee Member: www.iceis.org/ProgramCommittee.aspx?y=2018 Revised Manuscripts: 7 (regular and position).	2017-2018
Conferencia Latinoamericana sobre Uso de R en Investigación + Desarrollo (LatinR), en 47º JAIIO. Organizing Committee Member: http://latin-r.com/equipo/	2018

REVIEWER EXPERIENCE

Computer Science Education (Taylor & Francis; ISSN: 1744-5175)	1
e-Informatica Software Engineering Journal (ISSN: 1897-7979) This review was part of a survey, and the report can be read at Publon's: https://publons.com/blog/starting-out-in-peer-review-putting-skills-into-practice/	2018
48º International Conference on Computers and Industrial Engineering (ISSN: Not Yet Published)	ı
System Engineering (Wiley S. A.; <i>ISSN:</i> 1520-6858) Reviewer	2017

EDITORIAL EXPERIENCE

rOpenSci	2018-Present
Editorial Board Member, for Software Review	

HONORS AND AWARDS

Artificial Intelligence Undergraduate Contest: "Microorganisms Survival"

Universidad Tecnológica Nacional (Facultad Regional Santa Fe), Universidad Nacional del Litoral (Facultad de Ingeniería y Ciencias Hídricas), Universidad Nacional de Entre Ríos

Position: 3rd Prize

2011

5th National Conference of Information Systems Engineering Undergraduate Students

Universidad Tecnológica Nacional (Facultad Regional Córdoba): Title: "A Framework Contributing to the Logical Modelling of Object-Relational Databases"

Una Herramienta para el Modelado Lógico de Bases de Datos Objeto-Relacionales *Position:* Best Undergraduate Students' Research Work

2011

COMMUNITY SCIENCE ACTIVITIES

R-Ladies Santa Fe, Argentina

Founder, and main co-organizer

Goal: R-Ladies Santa Fe is part of a global organization to promote gender diversity in the R-users community. The goal is to create a friendly environment for women and gender minorities interested in programming in R, in Santa Fe, Argentina.

Work: I coordinate events, find venues, speakers, prepare activities schedules, and obtain sponsorship from different organizations. I was able to reach the Ministry of Science and Technology of Santa Fe Province, and coordinated activities such as presenting R-Ladies at different College Fairs.

2018-2019

Publons Verified Record

PREPARED BY PUBLONS ON MARCH 20TH 2019



Melina Vidoni

https://publons.com/a/1234715

Peer Review Summary

Performed 17 reviews for journals including *International Conference on Enterprise Information Systems* and *Proceedings of the International Conference on Enterprise Information Systems*; placing in the 85th percentile for verified review contributions on Publions up until March 2019.

- International Conference on Enterprise Information Systems
- Proceedings of the International Conference on Enterprise Information Systems
- 1 Systems Engineering
- e-Informatica Software Engineering Journal
- Computer Science Education
- International Conference on Computers and Industrial Engineering

Publons Academy

Completed the Publons Academy peer review course on November 27th 2017