



Dante Domizzi Sánchez Gallegos

Master of science

- March 31, 1995
- Lázaro Cárdenas 426. Col Héroe de Nacozari. Victoria, Tamps., MX.
- +52 834 116 3053
- ddomizzisag@gmail.com
- Mexican

Social Network

- ResearchGate
- Github Projects

Languages

- Spanish ● ● ● ● ●
- English ● ● ● ● ●

Software

- Virtual containers ● ● ● ● ●
- Docker and Kubernetes ● ● ● ● ●
- Microservices ● ● ● ● ●
- Latex ● ● ● ● ●
- C/C++ ● ● ● ● ●
- Java ● ● ● ● ●
- Python ● ● ● ● ●

Education

Study

- 2020 – now **PhD on computer science and technology** Universidad Carlos III de Madrid
Thesis: New techniques to build and manage agnostic workflows for the processing of digital products.
- 2017 – 2019 **Master of science in engineering and computational technologies** Cinvestav Tamaulipas
Thesis: Construction model of agnostic workflows to manage the life cycle of earth observation products.
Advisors: Dr. José Luis González Compeán and Dr. Victor Jesús Sosa Sosa
- 2013 – 2016 **Engineering in information technology** Universidad Politécnica de Victoria
Degree project: Focused web crawled based on web pages and semantic resources classification.
Advisor: Dra. Heidy Marisol Marín Castro

Participation on research projects

- 2020 – 2023 **Plataforma tecnológica para la gestión, aseguramiento, intercambio y preservación de grandes volúmenes de datos en salud y construcción de un repositorio nacional de servicios de análisis de datos de salud**
Conacyt-PRONACES
I worked developing a framework called Nez for the construction of non-structured data science systems.
- 2017 **Servicio federado de cómputo en la nube para el almacenamiento, procesamiento y distribución de imágenes satelitales**
Conacyt-AEM
I worked developing a geoportal for the indexing, searching and discovering of digital products. I also developed workflows for the processing of satellite imagery.

Research stays

- October 2022 – February 2023 **CICESE Monterrey** Advisor: Dr. Alejandro Galaviz
Project: Arquitecturas de cómputo edge-fog-cloud para el manejo y procesamiento de datos en ambientes IoT
- October 2018 – November 2018 **Parthenope University of Naples** Advisor: Dr. Raffaele Montella
Project: Developing middleware and scientific tools in the field of workflows for data processing
- January 2017 – August 2017 **Cinvestav Tamaulipas** Advisor: Dr. José González
Project: Cloud computing federated service to store, process and distribute satellite imagery.

Publications

- 2023 **CD/CV: Blockchain-based schemes for continuous verifiability and traceability of IoT data for edge-fog-cloud**
Martinez-Rendon, C., González-Compeán, J. L., Sánchez-Gallegos, D. D., & Carretero, J.
Information Processing & Management, 60(1).
- 2022 **On the Efficient Delivery and Storage of IoT Data in Edge-Fog-Cloud Environments**
Barron, A., Sanchez-Gallegos, D. D., Carrizales-Espinoza, D., Gonzalez-Compean, J. L., & Morales-Sandoval, M.
Sensors, 22(18), 7016.
- 2022 **PuzzleMesh: A puzzle model to build mesh of agnostic services for edge-fog-cloud**
Sanchez-Gallegos, D. D., Gonzalez-Compean, J. L., Carretero, J., Marin, H., Tchernykh, A., & Montella, R.
IEEE Transactions on Services Computing.

- 2022 **FedFlow: A federated platform to build secure sharing and synchronization services for health dataflows**
Carrizales-Espinoza, D., Sanchez-Gallegos, D. D., Gonzalez-Compean, J. L., & Carretero, J. Computing, 1-19.
- 2021 **An efficient pattern-based approach for workflow supporting large-scale science: The DagOnStar experience**
Sánchez-Gallegos, D. D., Di Luccio, D., Kosta, S., Gonzalez-Compean, J. L., & Montella, R. Future Generation Computer Systems, 122, 187-203.
- 2020 **From the edge to the cloud: A continuous delivery and preparation model for processing big IoT data**
Sánchez-Gallegos, D. D., Carrizales-Espinoza, D., Reyes-Anastacio, H. G., Gonzalez-Compean, J. L., Carretero, J., Morales-Sandoval, M., & Galaviz-Mosqueda, A. Simulation Modelling Practice and Theory, 105, 102136.
- 2020 **On the continuous processing of health data in edge-fog-cloud computing by using micro/nanoservice composition**
Sánchez-Gallegos, D. D., Galaviz-Mosqueda, A., Gonzalez-Compean, J. L., Villarreal-Reyes, S., Perez-Ramos, A. E., Carrizales-Espinoza, D., & Carretero, J. IEEE Access, 8, 120255-120281.

Publications in conferences and congresses

- 2022 **SecMesh: An efficient information security method for stream processing in edge-fog-cloud**
Torres-Charles, C. A., Carrizales-Espinoza, D. E., Sanchez-Gallegos, D. D., Gonzalez-Compean, J. L., Morales-Sandoval, M., & Carretero, J. In Proceedings of the 2022 7th International Conference on Cloud Computing and Internet of Things (pp. 8-16).
- 2022 **On the building of self-adaptable systems to efficiently manage medical data**
Sanchez-Gallegos, G., Sánchez-Gallegos, D. D., Gonzalez-Compean, J. L., & Carretero, J. In 2022 22nd IEEE International Symposium on Cluster, Cloud and Internet Computing (CCGrid) (pp. 985-992). IEEE.
- 2022 **SeRSS: a storage mesh architecture to build serverless reliable storage services**
Carrizales-Espinoza, D., Sánchez-Gallegos, D. D., Gonzalez-Compean, J. L., Carretero, J., & Marcellin-Jimenez, R. In 2022 30th Euromicro International Conference on Parallel, Distributed and Network-based Processing (PDP) (pp. 88-91). IEEE.
- 2021 **A federated content distribution system to build health data synchronization services**
Carrizales-Espinoza, D., Sánchez-Gallegos, D. D., Gonzalez-Compean, J. L., & Carretero, J. In 2021 29th Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP) (pp. 1-8). IEEE.
- 2019 **A microservice-based building block approach for scientific workflow engines: Processing large data volumes with dagonstar**
Sánchez-Gallegos, D. D., Di Luccio, D., Gonzalez-Compean, J. L., & Montella, R. In 2019 15th International Conference on Signal-Image Technology & Internet-Based Systems (SITIS) (pp. 368-375). IEEE.
- 2019 **Internet of things orchestration using dagon workflow engine**
Sánchez-Gallegos, D. D., Di Luccio, D., Gonzalez-Compean, J. L., & Montella, R. In 2019 IEEE 5th World Forum on Internet of Things (WF-IoT) (pp. 95-100). IEEE.
- 2019 **A data preparation approach for cloud storage based on containerized parallel patterns**
Carrizales, D., Sánchez-Gallegos, D. D., Reyes, H., González-Compeán, J. L., Morales-Sandoval, M., Carretero, J., & Galaviz-Mosqueda, A. In Internet and Distributed Computing Systems: 12th International Conference, IDCS 2019, Naples, Italy, October 10-12, 2019, Proceedings 12 (pp. 478-490). Springer International Publishing.

- 2018 **A containerized service for clustering and categorization of weather records in the cloud**
Sánchez-Gallegos, D. D., Gonzalez-Compean, J. L., Alvarado-Barrientos, S., Sosa-Sosa, V. J., Tuxpan-Vargas, J., & Carretero, J.
 In 2018 8th International Conference on Computer Science and Information Technology (CSIT) (pp. 26-31). IEEE.
- 2018 **An interoperable cloud-based geoportal for discovery and management of earth observation products**
Sánchez-Gallegos, D. D., Gonzalez-Compean, J. L., Sosa-Sosa, V. J., Marin-Castro, H. M., & Tuxpan-Vargas, J.
 Comput. Sci. Inf. Technol.(CS IT).

Chapter books

- 2022 **Muyal-Nez: servicios agnósticos para la creación de sistemas de ciencia de datos en e-salud**
Dante Domizzi Sánchez Gallegos, Jose Luis Gonzalez Compeán, Ricardo Marcelin Jimenez & Ricardo Landa Becerra
 In BigData en Salud: Tecnologías Emergentes y Aplicaciones (pp. 65-80), ISBN: 9786078857258, Montiel & Soriano Editores, S.A. de C.V.
- 2022 **Plataforma Tecnológica para la Gestión, Aseguramiento, Intercambio y Preservación de Grandes Volúmenes de Datos en Salud: Muyal-Ilal**
Jose Luis Gonzalez Compeán, Diana Elizabeth Carrizales Espinoza, Dante Domizzi Sánchez Gallegos, & Juan Armando Barron Lugo
 In BigData en Salud: Tecnologías Emergentes y Aplicaciones (pp. 105-121), ISBN: 9786078857258, Montiel & Soriano Editores, S.A. de C.V.
- 2022 **Reflexiones sobre el almacenamiento digital de las organizaciones**
Ricardo Marcelin Jimenez, Hugo G. Reyes Anastacio, Dante Domizzi Sánchez Gallegos, & Jose Luis Gonzalez Compeán
 In BigData en Salud: Tecnologías Emergentes y Aplicaciones (pp. 139-147), ISBN: 9786078857258, Montiel & Soriano Editores, S.A. de C.V.
- 2019 **Modelo de construcción de flujos de procesamiento agnósticos para gestionar ciclos de vida de productos de observación de la tierra**
Dante Domizzi Sánchez Gallegos, & Jose Luis Gonzalez Compeán
 In Avances en Ciencias en Ingeniería y Tecnologías Computacionales (pp. 139-147), ISBN: 9786079023621, Cinvestav Unidad Tamaulipas

Presentations on conferences, congresses, and workshops

- November 2022 **TopTamaulipas 2022**
Talk: Servicios de construcción de estructuras para el manejo del ciclo de vida de datos médicos
 Cinvestav Tamaulipas, México
- October 2022 **Taller en Ciencia de datos en salud, contaminantes y medio ambiente**
Talk: Muyal-Nez: Servicios para la construcción de sistemas de ciencia de datos no estructurados
Demo: Construye tus sistemas de ciencia de datos no estructurados (imágenes, ECGs y espirometrías) mediante la herramienta de diseño de Muyal-Nez
 Mérida, Yucatán, México
- September 2022 **Taller en Cómputo y almacenamiento en la nube para ciencia de datos**
Talk: Sistemas agnósticos para la creación de Sistemas de Ciencia de datos en eSalud
 Universidad Autónoma Metropolitana Unidad Iztapalapa, Iztapalapa, Ciudad de México, México
- August 2022 **Taller de Big Data en Salud**
Demo: Herramientas Zamná y Painal
Talk: Sistemas agnósticos para la creación de Sistemas de Ciencia de datos en e-Salud
 Benemérita Universidad Autónoma de Puebla (BUAP), Facultad de ciencias de la computación, Puebla, Puebla, México

August 2022	Taller en Telemedicina y ciencia de datos <i>Talk: Muyal-Nez: Servicios para la construcción de sistemas de ciencia de datos no estructurados</i> CICESE Unidad Foránea Monterrey, Monterrey, Nuevo León, México
November 2021	TopTamaulipas 2021 <i>Demo: Construcción y manejo de estructuras de procesamiento agnósticas de la infraestructura</i> Cinvestav Tamaulipas, México
March 2021	2021 29th Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP) <i>Presentation: A Federated Content Distribution System to Build Health Data Synchronization Services</i> Valladolid, Spain
October 2019	12th International Conference on Internet and Distributed Computing Systems (IDCS 2019) <i>Presentation: A Data Preparation Approach for Cloud Storage Based on Containerized Parallel Patterns</i> Naples, Italy
October 2018	2018 8th International Conference on Computer Science and Information Technology (CSIT) <i>Presentation: A containerized service for clustering and categorization of weather records in the cloud</i> Amman, Jordan
May 2018	7th International Conference on Information Technology Convergence and Services <i>Presentation An interoperable cloud-based geoportal for discovery and management of earth observation products</i> Vienna, Austria

Additional courses and certificates

2020	Project: Writing a Research Paper Coursera certificate Duration: 30 hours.	University of California, Irvine Online
2020	Understanding Research Methods Coursera certificate Duration: 10 hours.	University of London Online
2019	TOEFL ITP Score: 516 points.	Universidad Autónoma de Tamaulipas
2019	Arquitectura de software (contenedores y microservicios) Duration: 10 hours.	Cinvestav Tamaulipas, México
2019	Writing in the Sciences Coursera certificate. Duration: 5 hours.	Stanford University Online
2017	Procesamiento de grandes cantidades de datos Duration: 10 hours.	Cinvestav Tamaulipas, México
2016	Intensive english program – level 4. Duration: one month.	The Language Company, Edmond, Oklahoma

Awards

October 2019	Best paper award “Alfredo Petrosino” <i>12th International Conference on Internet and Distributed Computing Systems, Naples, Italy</i> A data preparation approach for cloud storage based on containerized parallel patterns
2016	Winner of Cinvestav Tamcoder 2016 <i>State programming contest organized by the Cinvestav Tamaulipas</i>