

Contact

nicolavaus@live.com

www.linkedin.com/in/nicolaslavalle
(LinkedIn)

Top Skills

Java (Programming Language)

Grades 7-12

Medical Physics

Certifications

Introduction to Python Programming Course

Stibo MDM Application Track

MDM Data Management

Machine Learning with Python

Publications

Lattice dynamical model of crystalline DNA: Intermolecular bonds and the A to B transition

Counter ion Effects on the Physical Properties and The A to B Transition of Calf-Thymus DNA Films

Nicolas Lavalle

Physics and Mathematics Teacher

Miami-Fort Lauderdale Area

Summary

My teaching approach emphasizes clarity, application, and fostering a deep understanding of the subject matter.

With prior experience teaching AP Physics, AP Statistics, and AP Computer Science courses, I bring a well-rounded perspective to STEM education. My commitment lies in equipping students with critical thinking skills and a strong academic foundation to succeed in their educational and professional journeys.

Experience

North Broward Preparatory School

Mathematics Teacher

January 2026 - Present (3 months)

Cocunut Creek, Florida, USA

Teach IB/AP Precalculus and Precalculus Honors

The Village School at Naples

Physics, Computer Science and Mathematics Teacher

August 2023 - August 2025 (2 years 1 month)

Naples, Florida, United States

Taught AP Physics 1, AP Statistics, AP Computer Science A, AP Computer Science Principles, Python using Raspberry Pi

Sitation

Senior Solution Architect

January 2023 - August 2023 (8 months)

Naples, Florida, United States

- Design Master Data Management solutions to Sitation clients using Stibo STEP MDM ver. 11.1
- Duties include Data Modeling, configuration of Import and Exports, design Workflow and Web UI, and development of Business Rules using JavaScript.

Wipro

Solutions Architect

March 2022 - September 2022 (7 months)

United States

- Design and implement Master Data Management solutions to Wipro's clients.
- Work implementing Riversand MDM version 8; architect solution, design data model, business rules, Workflows and Match and Merge to consolidate master data from 3 legacy systems and create a Golden Entity.

Magnitude Software

Senior Technical Architect

September 2021 - March 2022 (7 months)

United States

Design solutions to transfer master data from non-SAP systems to SAP Central Finance.

Document data quality rules. Document match and merge rules

White Cap

System Analyst

April 2021 - July 2021 (4 months)

Architect solutions for Data Management Projects in Customer, Supplier and Product domains.

Duties include:

Requirements Gathering

Development of Customer Data Management Process

Development of Data Models

Development of Data Integration

Development of Data Governance Process

Highmark

Business Analyst

September 2020 - March 2021 (7 months)

Pittsburgh, Pennsylvania, United States

Member of HCL's MDM team providing consulting services to Highmark's project to migrate IBM MDM to Informatica MDM

Liaison between the cross-functional teams, clients, users, and any stakeholder involved in the project.

Gather business requirements and consolidate list of attributes from Legacy systems.

Gather data standardization, cleansing, validation, and transformation

The World Bank

MDM Senior Consultant

February 2020 - August 2020 (7 months)

Washington, District of Columbia, United States

Member of Informatica's MDM team providing consulting services to World Bank's project to migrate Informatica MDM using ORACLE to Informatica MDM using MS-SQL.

Define strategies, develop, and deliver solutions using Informatica MDM, IDQ and PowerCenter.

Technical responsibilities include problem identification, system architecture definition, software specification, implementation, testing, client training, and solution deployment.

Payment Systems for Credit Unions

Technical Project Manager

January 2019 - August 2019 (8 months)

St Petersburg, Florida, United States

Member of Accenture's team providing consulting services to P.S.C.U.

Lead Team of 8 java developers located overseas.

Gather business requirements, translate them to technical requirements and track work progress using Agile-Kanban.

Southern Glazer's Wine & Spirits

MDM Analyst

May 2018 - August 2018 (4 months)

Miramar, FL

Design and developed data cleansing routines to improve data quality.

Work on algorithms to merge data from different data sources.

Work with business users to maximize the value SGWS's data.

Carlisle Interconnect Technologies

MDM Data Integration Lead

August 2017 - December 2017 (5 months)

St Augustine, FL

Work on data integration from 6 legacy systems to S4 SAP HANA

Design Data Mapping, Oversees transformation and data validation

Perform Data Profiling using Microsoft MDS and MS DQS

Boeing

MDM Business Analyst

April 2015 - December 2016 (1 year 9 months)

Bellevue, WA

Member of Enterprise MDM team at Boeing

Work with Boeing's Enterprise Architect group to plan MDM road map. Gather requirements, and document business case. Design Data Model using IBM MDM Advanced Edition. Design MDM mapping to legacy and downstream systems. Supervise implementation and developing Enterprise MDM solution

Tata Consultancy Services

MDM Consultant

April 2015 - December 2016 (1 year 9 months)

United States

Outerwall Inc.

MDM Systems Analyst

July 2014 - March 2015 (9 months)

Bellevue, WA

Perform hands on work in support of the application consisting in consolidation of Master Data from 4 different legacy systems using SoftwareAG webMethods OneData MDM. Provide guidance to business users and technology teams in areas of product capabilities, systems/configuration analysis, requirements, integration and support.

Ferguson Enterprises

MDM Architect

January 2014 - June 2014 (6 months)

Newport News, VA

Perform duties of solution architect for implementing Stibo's STEP MDM software.

Gather functional requirements for business processes.

Design Data modeling, workflows, business rules, Imports and Exports

Nordstrom

MDM Technical Project Manager

June 2013 - December 2013 (7 months)

Seattle, WA

Perform duties of project manager for implementing Riversand MDM Center in Nordstrom's Enterprise Product Management project.

Coordinate efforts between technical project managers of different consulting companies and Nordstrom utilizing Scrum methodology. Contribute information

and recommendations to strategic plans and reviews. Prepare and complete action plans; resolve problems and determine system improvements. Duties also include preparation of reports and weekly scorecards to present to C-level executives and coordinating communication between different groups involved in the project.

Excellent ability to create macros written in Visual Basic to present reports in MS Excel from data extracted from different sources such as MS Project.

Tata Consultancy Services

MDM Consultant

September 2011 - June 2013 (1 year 10 months)

United States

PepsiCo

MDM Architect / Business Analyst

April 2012 - May 2013 (1 year 2 months)

Plano, TX

Gather Functional Requirements for Phase 1 of PepsiCo MDM Project, involving consolidation of data from North America and Mexico. Functional requirements included Conversions and Interfaces between SAP ECC and other legacy systems to Teradata MDM, Enhancements, Workflows and Reports for MDM. Creation of Functional Mapping Designs from SAP ECC to MDM for Material Master and Vendor. Participate in MDM data modeling design. Participate in the design of the Solution Architecture including master data governance and data cleansing.

Viterra

MDM Architect

February 2012 - March 2012 (2 months)

Regina, Canada

Conduct architecture studies on Master Data Management solutions and provide recommendations of the most appropriate end-state technologies & solutions that will support future growth of the enterprise:

- Master Data Management (MDM)
- Master Data Governance (MDG)
- Data Quality technology

Guide the client in creating a road map to plan, implement and develop an MDM Solution, to consolidate MDM data from the result of Mergers and Acquisitions.

PepsiCo

MDM Architect / Java Developer

September 2011 - January 2012 (5 months)

Plano, TX

Team member of a group that conducted evaluation between Teradata MDM and SAP MDM.

Involve in implementation of SAP-MDM as of a proof of technology (PoT).

Designed PoT project that involved transferring data from SAP ECC to SAP MDM using SAP PI.

Implemented Web Dynpro MDM Components to display SAP MDM data in a web browser.

Developed Web Dynpro for Java Components to interface with SAP MDM Java API.

IBM

MDM Project Manager

May 2010 - August 2011 (1 year 4 months)

Southbury, CT

Perform duties as project manager in Information Management, for a global integration project including countries in North America, Europe, and Asia.

Develop and Maintain project plan for areas in Information Management, including Master Data Management, Business Intelligence, Data Integration, and Information Governance. Duties also include preparation of reports and weekly scorecards to present to C-level executives and coordinating communication between different groups involve in the project.

Excellent ability to create macros written in Visual Basic to present reports in MS Excel from data extracted from different sources such as MS Project and SAP Solution Manager.

Sita Corp

MDM Architect

October 2007 - April 2010 (2 years 7 months)

Sommerser, NJ

Work as a Solution Architect specializing in Master Data Management.

Provide assistant to pre-sales technical team in proposing solutions and developing demos and proof of concepts

Work as a Project Manager

Implementation of SAP MDM ver 7.1.

Gather business requirements.

Design and Develop MDM data model and integration between SAP MDM and WebSphere Process Server.

Design and Develop Validation Rules, Assignments and Workflows for creation and modification of records.

IBM

System Analyst / Technical Sales

December 2000 - October 2007 (6 years 11 months)

Atlanta, GA

With the world's leader in software products participate in pre and post sales solutions applying IBM's MDM solutions, including IBM's WebSphere Product Center, WebSphere Customer Center, and WebSphere Portal.

Work with IBM sales team to provide information documents, Proof of Technology seminars, presentations, demonstrations, and Proof of Concept about WebSphere Application Server, WebSphere Portal, WebSphere Product Center, and WebSphere Process Server to companies in the Insurance, Banking, Retail, and Tourism industries and also to the public sector.

Responsibilities involve collecting customer requirements, writing proposals, gathering and managing IBM resources to develop the solution, and implement the final product

- Developed and managed project plans to implement IBM solutions. Work with business analyst to determined systems requirements, discussed and analyzed the software solution with the architectural team.

Bellsouth Information Systems

Systems Analyst

June 2000 - December 2000 (7 months)

Atlanta, GA

Selected for solid experience in Internet development to create Java programs for Website Realpages.com. Duties encompassed gathering user requirement from the marketing group and supervising a team of five programmers.

- Designed and implemented applications for data transfer from

- Realpages.com to third parties utilizing XML via HTTP.

- Developed the system for selling company's Web products in XML format in three weeks instead of allocated eight weeks.

Federated Systems Group

Senior Analyst Programmer

April 1999 - June 2000 (1 year 3 months)

Duluth, GA

Joined the provider of software and computer processes for Federated Department Stores to develop server-side programs for Website Macys.com and to design connectivity to backend system utilizing XML via HTTP.

- Developed an application providing real time data of Macy's inventory to a client that enabled eliminating over \$300,000 in federal penalties.
- Created Java programs for company's Website with three-tier architecture using servlets, connection pool to DB2 and XML DOM parser.

Checkfree Corp

Software Engineer

July 1996 - April 1999 (2 years 10 months)

Norcross, GA

Chosen by an established banking software company to provide development and technical support for the Automatic Cash Control Electronic Statement System (ACCESS).

- Designed enhancement and modifications for the year 2000 release of ACCESS utilizing C/C++ in AIX/UNIX environment.
- Developed an application for merging accounts of two banks in four weeks that brought in \$50,000 in revenue.

Schneider & Wuest Incorporated

Medical Physicist

August 1993 - July 1996 (3 years)

Toledo, Ohio Metropolitan Area

Selected by a consulting firm in medical physics to assume responsibility for monthly and annual calibration of linear accelerators. Duties entailed performing dosimetry and verification of treatment planning, executing seal source leak testing, calibrating sealed sources, and supervising block forming devices.

- Improved visualization of radiology images by applying tomosynthesis techniques that increased planar visualization of the body and reduced patient's exposure to radiation.
- Developed programs for data acquisition

Medical College of Ohio

Fellow in Medical Physics

August 1992 - August 1993 (1 year 1 month)

Toledo, Ohio Metropolitan Area

Brought in to develop Fortran programs for calculating dose deposition using Monte-Carlo simulations. Position involved writing C programs that processed medical diagnostic images, performing quality assurance, and providing annual measurements for linear accelerators and dosimetry.

- Improved data acquisition by developing innovative method of calculating dose deposition.

The University of Toledo

6 years

Research Scientist

August 1990 - August 1992 (2 years 1 month)

Toledo, Ohio, United States

Joined the University to research growth of thin film semiconductors and perform data analysis via Raman scattering, photoluminescence, and X-ray diffraction.

- Constructed a vacuum chamber for growth of semiconductors by pulsed laser deposition that resulted in publication in a scientific edition.

Teacher Assistant

September 1986 - September 1990 (4 years 1 month)

Toledo, Ohio, United States

Teach freshman physics courses and laboratories.

Notre Dame High School

Mathematics Teacher

August 1984 - June 1986 (1 year 11 months)

Staten Island, New York, United States

Teach Mathematics grades 9-12

Education

The University of Toledo

Master's degree, Physics · (September 1986 - August 1990)

Wagner College

B.S., Physics · (September 1980 - November 1983)

The University of Toledo

Master of Science - MS, Physics · (September 1986 - August 1990)