

Carlos Watts-Nogueira

AI/ML Engineer

(845) 873-3400 | carloswattsnoqueira@gmail.com | Middletown, NY

[linkedin.com/in/carloswattsnoqueira](https://www.linkedin.com/in/carloswattsnoqueira) | github.com/cwattsnoqueira | <https://cwattsnoqueira.github.io/>

AI/ML Engineer specialized in designing end-to-end machine learning systems and reproducible pipelines that scale efficiently across enterprise environments. Experienced in developing, deploying, and optimizing NLP and LLM-based applications using MLOps practices and intelligent automation. Passionate about transforming complex data into strategic insights through prompt engineering, model evaluation, and visual storytelling.

TECHNICAL SKILLS

Languages: Python, SQL

Tools/Libraries: TensorFlow, Keras, Scikit-learn, PyTorch, LangChain, Hugging Face, Pandas, NumPy, Matplotlib, Seaborn, Plotly, OpenCV.

Applied AI: Modular Workflow Design, Model Optimization, Prompt Engineering, Generative AI, NLP Pipelines

Business Delivery: Executive Reporting, Visual Dashboards, HTML/PDF Report Automation

Deployment & Tools: Gradio, Hugging Face Spaces, JupyterLab, Colab, Git

Cloud & APIs: AWS, REST APIs, Salesforce (SOQL), CRM Integration

Certifications:

AWS Certified Machine Learning Engineer - Associate (In Progress - Expected: February 2026)

Salesforce Certified AI Associate (Achieved: December 2024)

Salesforce Certified Associate (Achieved: April 2023)

Salesforce Certified Service Cloud Consultant (Achieved: July 2022)

Salesforce Certified Administrator (Achieved: July 2020)

Copado Certified Administrator (Achieved: July 2020)

Scrum Foundations Professional Certificate SFPC (Achieved: July 2020)

ADDITIONAL TRAINING

AWS Artificial Intelligence Practitioner Learning Plan, AWS

Prompt Engineering for Everyone, IBM Skills Network

TECHNICAL PROJECTS

E-commerce Review Intelligence | AI/ML Engineer & NLP Specialist | October 2025 | <http://bit.ly/3Ja4CDj>

- Developed an end-to-end AI pipeline to analyze customer reviews from structured and unstructured data. Applied NLP, ML, and DL techniques to predict product ratings, detect fake/spam reviews, and generate product insights. Engineered features such as review length, sentiment polarity, and metadata anomalies to train classification and anomaly detection models. Built a Gradio-based app for real-time review summarization using LLMs. Designed proxy labeling strategies for fake review detection using helpfulness scores, sentiment extremes, and metadata patterns.
- Technologies / Skills:** Python · Pandas · NumPy · Scikit-learn · VADER · TextBlob · Word2Vec · GloVe · TensorFlow · PyTorch · BERT · Transformers · Gradio · Data Cleaning · Feature Engineering · Sentiment Analysis · Anomaly Detection · Model Evaluation · LLM Summarization · Deployment

BikeEase Ad Generator Generative | AI Engineer | August 2025 | <https://bit.ly/4fZUkSj>

- Developed a modular, LLM-powered system to generate persuasive bike rental advertisements based on user inputs. Integrated Hugging Face models and LangChain for prompt orchestration, and deployed the app with a Gradio front-end on Hugging Face Spaces. Structured outputs into six branded sections to ensure consistency and business readiness.
- Technologies / Skills:** Python · Hugging Face Transformers · LangChain · Gradio · Prompt Engineering · Modular Design · Generative AI · Text Generation · Deployment · Reproducibility

Employee Turnover Prediction -HR Analytics for Retention Strategy | ML Engineer | July 2025 | <https://bit.ly/47e4n3K>

- Predictive classification project developed. Designed a full workflow to forecast employee attrition using clustering, resampling (SMOTE), and classification models with 5-fold cross-validation and ROC curve analysis. Delivered insight-driven retention strategies across four risk zones.
- Technologies / Skills:** Python · Scikit-learn · SMOTE · KMeans · Logistic Regression · Random Forest · Gradient Boosting · ROC/AUC · Confusion Matrix · PCA · Feature Engineering · EDA · Jupyter Notebook · matplotlib · seaborn.

ADDITIONAL TECHNICAL PROJECTS

Technologies / Skills: Python, NLP, Machine Learning, Deep Learning, and Data Analytics | <https://cwattsnogueira.github.io/>

EXPERIENCE

Solution Engineer (Pre-Sales) & Consultant | SoftTech Smile | Remote | February 2024 – July 2024

- Designed and delivered Salesforce AI-driven Proofs of Concept (PoCs), leveraging Einstein Bots and Discovery to solve client pain points with workflow automation and performance optimization.
- Translated complex business requirements into scalable, data-centric architectures, enabling real-time metrics and KPIs tracking via dashboards and structured reporting.

Functional Analyst III | Ilia | Remote | October 2021 – July 2023

- Spearheaded delivery of custom cloud-based solutions across finance, healthcare, and retail by defining specifications, analyzing data workflows, and coordinating development roadmaps.
- Enabled AI-powered experiences through Salesforce Einstein Bots, Discovery, and Next Best Action, optimizing system performance for real-time analytics and automated decision-making.
- Created and delivered data-driven PoCs using Salesforce Cloud and predictive modeling, ensuring client AI-readiness and alignment with key metrics and performance indicators.
- Conducted advanced data operations including object/field design, data imports/exports, and SOQL query optimization for analytics, reporting, and automation.
- Built Salesforce dashboards to equip business consultants with real-time insights and tracked project KPIs using Amazon QuickSight, JIRA, and Excel.

Advanced App Engineering Specialist | Accenture | Hybrid | July 2019 – August 2020

- Led an 8-person team in delivering scalable Salesforce solutions for enterprise clients, aligning system design with product objectives and performance metrics.
- Implemented flows, process builders, and validation rules to streamline operations and support Salesforce Einstein AI-enhanced features.
- Configured data structures and reporting components to enable KPI tracking and business insights.
- Oversaw agile delivery across sprint cycles, backlog management, and time tracking aligned with data-driven business goals.

Functional Technical Consultant | Hendercross | Hybrid | July 2018 – January 2019

- Implemented Salesforce Sales Cloud solutions, optimized system usability, and defined platform integration requirements for improved data flow and usability.

Functional Analyst Senior | Unitech S.A. | Hybrid | June 2017 – July 2018

- Customized ERP platforms and designed database integrations (SQL Server, Oracle), ensuring data reliability and performance in government and finance systems.

Functional Technical Consultant | Inworx | Hybrid | March 2016 – June 2017

- Implemented and optimized Telesoft CRM workflows and configured integrations with Microsoft SQL Server and Oracle for consistent data and reporting accuracy.

Internal Technical Support Analyst | Open English | Hybrid | June 2014 – March 2016

- Provided technical support for Open English platforms and finance tools (Zuora), optimizing Salesforce workflows and resolving data-related incidents.
- Executed SQL queries in PostgreSQL for root cause analysis and implemented controlled data changes; maintained issue tracking using Jira.

EDUCATION

University of San Diego

April 2025–October 2025

Powered by Fullstack Academy

Artificial Intelligence and Machine Learning

Immersive AI & Machine Learning program which utilized active learning to gain proficiency in data technologies and tools including Python, Keras, and TensorFlow, and understanding of machine learning, deep learning, and data science processes.

Higher Technical Training Institute

December 2017

Higher Technician in Systems Analysis

Focused on Systems Analysis, Computer Information Systems, and related technical disciplines. Developed a strong foundation in software architecture, systems design, and business logic analysis with practical coursework and hands-on training.