# JEAN NAUDE

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## **SUMMARY**

Senior Machine Learning Engineer with 4 years of experience delivering production-level ML models for major retail and financial clients. Co-founder of a non-profit that developed open-source epidemiology simulation software used by the World Health Organization. My strength is rapidly deploying observable, impactful models that drive key business decisions.

## **EXPERIENCE**

## Machine Learning Engineer — Spatialedge

Jun 2021 – Present

- Served as Technical Lead Engineer on two enterprise data applications providing optimized results in retail and financial sectors
- Mentored junior engineers and provided technical guidance while engineering the technical foundation for both projects
- Productionized and contributed to 8 machine learning models including Lead Time Forecasting, Demand Forecasting, and Interbranch Transfers Optimization
- Developed Workforce Planning Optimization and Cash Replenishment Forecasting applications using React, TypeScript, GraphQL frontends with Ruby/PostgreSQL backends
- Implemented CI/CD pipelines using GitLab and GCP with Terraform for infrastructure automation

## **SKILLS**

Languages & Frameworks: Python, C++, SQL, JavaScript, TypeScript, Ruby, Bash, C

ML & Data Science: PyTorch, Scikit-Learn, TensorFlow, Time Series Forecasting, Machine Learning, Computer Vision

Infrastructure & DevOps: GCP, Docker, Kubernetes, Terraform, CI/CD, Airflow, Dagster, Helm, Git, Linux

Databases & Systems: PostgreSQL, BigQuery, Redis, CUDA, GraphQL, Crow API

#### **EDUCATION**

ESIEE PARIS — Master's of Science in Computer Science

2021

Pearson Institute — Bachelor's of Science in Information Technology

2018

# **PROJECTS**

# **VISS (Viral Infection Simulation Subsystem)**

github.com/twigglits/viss

- Engineered first open-source Viral Infection Simulation Subsystem providing valuable insights to the World Health Organization
- Implemented backend using Redis DB, C++, and Crow API with CUDA acceleration for high-performance epidemiological modeling
- Developed modular frontend using React and TypeScript with CSS Tailwind for interactive simulation visualization

# **Spatialedge Analytics DF Auditor**

pypi.org/project/spatialedge-analytics-dfauditor

- Created DataFrame auditing and validation tools for machine learning pipeline quality assurance
- Implemented automated testing framework ensuring data integrity across multiple client projects
- Published Python package to PyPI for broader community use in data science workflows

# **CERTIFICATIONS**

Python for Data Science and Machine Learning Bootcamp — 2025

https://www.udemy.com/certificate/UC-1fcc8e47-b153-45b2-b43b-7c117e1fd2db/

Time Series Analysis, Forecasting and Machine Learning — 2025

https://www.udemy.com/certificate/UC-a567a1fa-c83a-43d9-82ff-df5cdacb4d5e/a567a1fa-c85

Data Science and Machine Learning Bootcamp with  $R\,{--}\,2019$ 

https://www.udemy.com/certificate/UC-65MDQ02B/

Calculus 1 — 2019

https://www.udemy.com/certificate/UC-37U23IL1/