

# JEAN NAUDE

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## SUMMARY

Senior Machine Learning Engineer with 4 years of experience delivering production-level ML models for a major retailer. Former Co-founder of a non-profit that developed open-source epidemiology simulation software used by the World Health Organization.

My strength lies in rapidly deploying observable, impactful models that drive key business decisions in their organizations. I enjoy taking on difficult problems and developing solutions at a rapid pace whilst maintaining measurable and observable improvement in automation, optimization and model accuracy. I enjoy working with hardworking people who want to get results fast, can communicate effectively, and are open to feedback so that decisions can be made and improvements can be implemented.

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## 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 in the Retail sector. And ATM replenishment forecasting and optimization in the Financial Sector
  - Contributed development to various credit scoring models in the Financial sector, and mentored 5 junior engineers on software engineering best practices and approaches
  - Developed Workforce Planning Optimization and Cash Replenishment Forecasting enterprise-grade data applications
  - Implemented CI/CD pipelines using GitLab and GCP with Terraform for infrastructure automation
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## 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, Azure, Docker, Kubernetes, Terraform, CI/CD, Airflow, Dagster, Helm, Git, Linux

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

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## EDUCATION

ESIEE PARIS — Master's of Science in Computer Science

2019-2021

Pearson Institute — Bachelor's of Science in Information Technology

2015-2018

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## PROJECTS

### VISS (Viral Infection Simulation Subsystem)

[github.com/twigglits/viss](https://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](https://pypi.org/project/spatialedge-analytics-dfauditor)

- Created DataFrame auditing and validation tools for machine learning pipeline quality assurance
  - Published Python package to PyPI for broader community use in data science workflows
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## 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/>

### 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/>