

CHRIS COUGHLIN

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RECENT EXPERIENCE

NTT DATA

Data Scientist Consulting Manager

December 2024 - Present

Minneapolis, MN

- Explainable AI for estimating physical security risk for a Fortune 500 healthcare provider's facilities
- Recommendation system cold start mitigation pipeline and graph embeddings for search augmentation for a top interactive entertainment company
- Feasibility of GraphRAG built on Azure CosmosDB (internal sales)
- Self-contained open source Llama RAG framework for a leading construction engineering company

Datasite

Senior AI/ML Scientist

November 2021 - December 2024

Minneapolis MN

- Interactive agentic chat with one or more documents in a Virtual Data Room (VDR)
- Fine-tuned open source LLMs for entity extraction and document classification
- Hierarchical taxonomy document classification deep learning model
- Deep learning model for strategic and financial investment recommendations

U.S. Bank Wealth Management and Investment Services

Data Scientist Officer

April 2019 - November 2021

Richfield, MN

- Stock dividend forecasting
- Explainable AI for predicting failure in mission critical applications
- Anomaly detection for flagging unusual fund transactions in near real-time
- Survival analysis for predicting customer attrition

C.H. Robinson

Data Science Engineer

April 2017 - April 2019

Eden Prairie, MN

- Deep learning model for classifying shipping documents. Scanned more than 35,000 documents per day in production with an accuracy of 96%
- Deep learning model for tagging signed vs. unsigned shipping documents
- Procedure for placing "orphaned" documents with the correct shipment to reduce invoice processing time

Emphysic LLC

Founder and CEO

August 2015 - October 2019

Hopkins, MN

- Founded NASA-funded startup
- Distributed fault-tolerant machine learning algorithm for finding cracks and other defects in aircraft

Additional Experience

- Data Science Engineer (Contata Solutions, Minneapolis MN)
- Computational Physics Programmer (AECL, Chalk River ON)
- Applied Physicist (Texas Research Institute Inc., Austin TX)

EDUCATION

Queen’s University
M.Sc. Physics

Lakehead University
HBSc. Physics

CORE COMPETENCIES

Analytics	Data Science, Statistical Analysis
AI/ML	Deep Learning, Natural Language Processing, Anomaly Detection, Time Series Forecasting
GenAI	RAG, GraphRAG, Agentic applications, fine-tuned LLMs
Software Development	Python, Pandas, Polars, Agile, Git, REST

PATENTS

US7080555B2
Distributed Mode System for Real-Time Acoustic Emission Monitoring