PROFILE

Artificial intelligence engineer with deep expertise in RAG (Retrieval-Augmented Generation), NLP, and LLMs. I develop innovative solutions combining advanced AI, cloud computing, and intelligent applications. Extensive experience in Python development and strong interest in web/mobile architectures and cloud infrastructure. Passionate about performance optimization and technological process automation to create high-value solutions.

CONTACT

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450-775-1056

CONFERENCES

2024 - Evaluation and Optimization of LLMs and RAG (IVADO)

ACADEMIC PROJECT

2024
Udes

DOFA

Participated in the design of the DOFA project focused on developing an automated quality assurance system for industrial parts. Utilized computer vision and deep learning, with an initial application on welded parts (tanker station handle).

QUALITÉS

- Self-taught
- Organized
- Efficient
- Strong problem-solving skills
- Clear communicator
- Committed
- Team player
- Involved

Charles Veillette
COMPUTER ENGINEER

SKILLS

Languages : French (native), English (fluent)

Informatique et autres:

Programming & Frameworks:
- Dart & Flutter
- Python (pytorch, Streamlit)
- JavaScript/TypeScript (React, Redux, Node.js)
- C#
- SQL (PostgreSQL, Sybase)

Cloud & Infrastructure
- AWS (EC2, Lambda, S3, RDS, API Gateway)
- Terraform
- Docker & Kubernetes
- Azure
- CI / CD
- Github action

Artificial Intelligence & Data:
- Retrieval-Augmented Generation (RAG) with LangChain
- LLMs (OpenAI GPT, Gemini, Claude)
- Vector databases
- Computer Vision: YOLO v5/v8
- ML Models: fine-tuning, embeddings, PyTorch pipelines

EDUCATION

2024 - Bachelor's Degree in Computer Engineering (Co-op Program)
Université de Sherbrooke

2020 - College Diploma in Natural Sciences
Cégep de Granby

PROFESSIONAL EXPERIENCE

SEPTEMBER 2024 - PRESENT
Croesus

AI RESEARCH DEVELOPER
- Optimization of RCTGAN implementation for synthetic data generation (PyTorch, NumPy, Pandas)
- Comparative analysis of emerging AI frameworks (LangChain, DSPy, Crusor): technical recommendations with industrial adoption criteria
- Independently developed a C# generator creating thousands of consistent financial records within minutes for demo purposes

SUMMER 2024
Croesus

AI DEVELOPMENT INTERN
- Improved an AI-powered search solution (RAG)
- Developed a natural language search feature
- Created an API to simplify integration of new functionalities

FALL 2023
Croesus

AI DEVELOPMENT INTERN
- Designed an AI-augmented research project
- Fine-tuned embeddings for a vector database
- Conducted research in evaluating RAG solutions

WINTER 2023
Rheinmentall

STAGE EN DÉVELOPPEMENT INTELLIGENCE ARTIFICIELLE
- Created and managed a dataset using cloud storage
- Trained convolutional neural networks
- Developed a multi-agent control application

SUMMER 2022
Allema Global

FULLSTACK INTERN
- Established standards for React/Redux projects
- Refactored C# solutions into JavaScript
- Implemented database-to-UI communication

FALL 2021
CAE

IMMERSIVE SYSTEMS DEVELOPMENT INTERN
- Developed features for the MEDT
- Debugged departmental applications
- Optimized XML model storage