

MACHINE LEARNING | PROGRAMMING | PROBLEM SOLVING

TECHNICAL SKILLS

Programming:	Python, Java, C#, JavaScript, Bash.
Machine Learning:	PyTorch, TensorFlow, Keras, Pandas, Matplotlib, Hadoop, Spark, Power BI, Tableau, Gradio, Streamlit.
Database:	Oracle Database, SQL, PostgreSQL, MongoDB.
Full Stack:	Node.js, Bootstrap, Express.js, React, Flask.
Operating Systems:	Unix/Linux, Windows.
Tools:	Trello, GitHub, Anaconda, Visual Studio Code, Visio, Excel, MS Project, Overleaf.

RELATED WORK EXPERIENCE

Machine Learning Researcher (Co-op) Altilia, Remote	Jan. 2024 - Apr. 2024
<ul style="list-style-type: none">Experimented with state-of-the-art open-source document layout analysis (DLA) models on public datasets, using the PyTorch, Transformers, and Detectron2 libraries of Python in Google Colab.Created a LaTeX report that outlines the latest trends in DLA, including a classification of models and datasets, an evaluation of their performance, and the identification of areas for future improvements.Studied recent neural network-based approaches for document layout analysis and document understanding, focusing on transformers architecture and large language models (LLMs).Conducted a literature review of datasets and performance benchmarks for document layout analysis.	

SELECT PROJECTS

2 nd Place Winner - Feed Scarborough Hackathon Scarborough Food Network, Toronto, ON
<ul style="list-style-type: none">Coordinated with a 6-member team to distribute tasks efficiently, utilizing GitHub as a version control toolDesigned subsystems and developed the front-end with React, contributing to the web application.Designed future back-end functionalities to be implemented using MongoDB for database management and Node.js for server-side development, achieving all objectives set by the organizers.Participated in presenting the project to representatives of the Scarborough Food Network, which resulted in our team being recognized as one of the most proficient teams (awarded 2nd Place)
Document Classification with LayoutLMv3 - https://huggingface.co/spaces/aegnor8/layoutlmv3
<ul style="list-style-type: none">Analyzed the classification problem and selected the most suitable model to perform the task.Fine-tuned LayoutLMv3 base model to classify documents into income statements, balance sheets, cash flows, notes, and others, using PyTorch and Transformers libraries.Deployed the application on HuggingFace Space using Streamlit for a user-friendly interface, enabling straightforward model inferences.
Professional Portfolio - https://mattiaportfolio.onrender.com/
<ul style="list-style-type: none">Created a personal portfolio website using EJS (Embedded JavaScript), showcasing web development skills.Designed a user-friendly interface showcasing academic projects, services, and contact information, resulting in increased visibility and professional branding.Utilized cloud deployment to make the portfolio accessible online, enabling accessibility.

EDUCATION

Software Engineering Technology - Artificial Intelligence (Co-op) Advanced Diploma			Jan. 2023 - Present
Centennial College, Toronto, ON			GPA: 4.3/4.5 (A)
Relevant courses:			
Supervised Learning	Advanced Database Concepts	Data Structures and Algorithms	
Web Application Development	Software Testing and QA	Networking for Software Developers	
Linear Algebra & Statistics	Unix/Linux OS	Advanced Business Communications	

PROFESSIONAL DEVELOPMENT

Data Engineering Foundations - LinkedIn Learning	May 2024
Accenture North America Data Analytics and Visualization Job Simulation - Forage	Apr. 2024
Machine Learning Operations (MLOps): Getting Started - Google Cloud	Dec. 2023
Applied AI: Getting Started with Hugging Face Transformers - LinkedIn Learning	Dec. 2023
Data Science Foundations Fundamentals - LinkedIn Learning	Sept. 2023
Data Visualization for Data Analysis & Analytics - LinkedIn Learning	Sept. 2023
SQL (Basic) - HackerRank	Aug. 2023
Agile Development Practices - LinkedIn Learning	Feb. 2023

OTHER WORK EXPERIENCE

Kitchen Assistant (Part-Time) Pizzeria Via Mercanti, Toronto, ON	Apr. 2024 - Present
<ul style="list-style-type: none">Organized and maintained cleanliness of work spaces, promoting a safe & efficient working environment.Cleaned and sanitized plates, cutlery, and equipment, ensuring high hygiene and safety standards.Participated in food preparation, including chopping, cutting ingredients, and assisting cooks, effectively reducing the workload of other staff members during rush hours.	
Claims Adjuster Dekra Italia s.r.l., Milan, Italy	Jul. 2015 - Dec. 2022
<ul style="list-style-type: none">Managed fleet claims and analyzed damage compensation for 90+ tasks monthly, delivering accurate assessments within a fast-paced operational environment.Established and maintained client relationships, facilitating clear communication with stakeholders.Coached 5 new employees in fleet claims processing, enabling them to meet set standards and proficiently use processing software.	