Montréal, QC Website: <u>elnukakujo, github.io</u> E-Mail: <u>jager.noe@umontreal.ca</u> tel: +33695902502

EDUCATION (For more details, https://elnukakujo.github.io/#/education)

Master in Computer Science at University of Montréal

September 2022 -Now

- GPA: 2.9/4
- Relevant courses: Data Science, Machine Learning Fundamentals, Data Visualization, 3D Vision, Model-Based Software Engineering, and Empirical Methods in HCI

Bachelor of Computer Science at the University of Luxembourg

September 2019 - July 2022

- GPA: 3.0/4
- Relevant courses: Web Development, Software Engineering, Networking and Communication, Cybersecurity 1 and 2, Human-Computer Interaction and User-Centered Design

Online Courses

- Data Mining Specialization by the University of Illinois at Urbana-Champaign (Coursera)
- Deep Learning Specialization by Deeplearning.ai (Coursera)
- Generative AI with Large Language Models by Deeplearning.ai and AWS (Coursera)

PROJECTS & EXPERIENCE (For more projects and details, https://elnukakujo.github.io/#/projects)

GraphRAG Chatbot application using Neo4j, Langchain, React and Flask

January - March 2025

- Applied Generative AI with GraphRAG knowledges from Coursera to create 3 agents to generate responses and update the Neo4j databases using tools I designed.
- Designed a Flask server to execute the agents while keeping a low delay for answer generation (around 5-6 seconds) for users.
- Designed a client app using Figma for prototyping, and React (+Redux) for application development.

Sign Language Recognition with Deep Neural Network using Basic TensorFlow

August 2024

- Experimented multi-class classification using Tensorflow, Plotly, and OpenCV for classifying 24 letters of the American Sign Language.
- Practiced hyperparameter tuning, metrics, and data visualization and created basic NN architectures from low-level Tensorflow operations.

Analytics website for League of Legends player data (http://dev.summonerinsight.com/)

June 2024 - now

- Designed a backend application with .Net and the Riot API, as well as a frontend application with React.
- Applied key software engineering principles and UX design methodologies to ensure the applications met users' needs and requirements.
- Learned DevOps concepts to host applications on home server and integrated Google Analytics to enhance users' experience.

Soccer Data Analysis with SportsAI (https://sportsaiproject.onrender.com/)

May - June 2024

- Collaborated on a team project to create visualizations using Plotly in Python, leveraging a large dataset from Euro 2020
- Utilized Dash and CSS to design and develop an interactive webpage for presenting the visualizations

Handwriting Recognition with Tensorflow

September 2021 - January 2022

• Created a Convolutional Neural Network with TensorFlow to recognize different people's letters from the Roman alphabet with different handwriting.

Conversational Chatbot with TensorFlow

February - July 2021

- Created a model following a transformer architecture with Encoder and Decoder in Python with the TensorFlow library.
- Performed data extraction, cleaning, and model definition, followed by training the model.
- Developed a user-friendly interface for the chatbot to enable seamless interactions.

SKILLS

- Programming Languages: Python, Swift, Java, C++, Javascript, SQL, HTML5/CSS, R, C#
- Frameworks: React, .Net, OpenCV, Plotly/Dash, Pandas, Tensorflow/Keras, Sklearn, OpenCV, LangChain, Flask
- Technical Skills: Windows/Linux/WSL, command-line editors, Git, Unreal Engine 4/5, Docker Engine, Virtual Machine, Backend, Frontend, Data Management, Artificial Intelligence, Data Science, Neo4j Desktop/Console, AWS ElasticBeanStalk, AWS Cloudfront, AWS Amplify, Figma
- Numerical Software: Mathematica
- IDEs: Visual Studio Code, Eclipse, IntelliJ, Jupyter Notebook, Google Collab, R Studio, MySQL, JetBrains