

Laurent KALPERS DATA SCIENTIST







PROFILE SUMMARY

With his Engineering background, Laurent loves to solve complex problems using technical tools.

His master in computer science drove him to participate in numerous projects using real-world data.

Laurent is always thriving to develop new skills. In his free time, he enjoys playing video games with friends and playing badminton.

Areas of expertise

- Machine learning (Scikit-learn)
- Deep learning (Keras, Pytorch, TensorFlow)
- Data visualization (Excel, Matplotlib, plotly)
- Mathematical modeling (Python, Matlab, R)
- Deployment (C++, PHP, HTML, Java, SQL)
- Management (Scrum, Kanban)
- Cloud technologies (Azure, GCP)

Languages

English: fluentFrench: native

PROJECT EXPERIENCE

Manakeen

Liege,

Belgium 2022 **Machine Learning Engineer Consultant**

- Joined E-novation team as a computer vision engineer in a weapon manufacturer
- Developed a lightweight deep learning model to detect specifics objects on a frame
- Deployed this model on an embedded device with real-time requirements
- Involved on numerous projects including synthetic data, human segmentation and target detection

Cognizant Brussels, Belgium

2021

Junior Data Scientist Consultant

- · Joined a team of 16 people as a data engineer at Belgium bank
- · Maintaining existing data pipelines and insuring their integrity
- · Defined requirements for new data pipeline with non-technical people
- Developed new pipelines, unit tests, integration tests and supervised their deployment in complex existing data architecture
- Developed automated prediction of yearly Belgian energy consumption
- · Worked with a team to deliver proof of concept for automated fiber deployment

INHA, Incheon,

2020

Incheon, South Korea Research thesis – Detection of stress in the wild using non-invasive data collection devices

- Developed data acquisition app on Android phone and smartwatch
- Conducted data collection campaign for 3 months
- · Developed feature extraction based on the literature
- Implemented and compared SVM, XGBoost and decision tree results to predict stress
- Collaborated with University of Mons to get insight from machine learning experts

TheiaLab, London, United Kingdom 2019

Artificial Intelligence Engineer - Automated gym reports using a camera

- Interacted daily with 3 founders in a start-up environment
- Developed algorithms for tracking individuals on video
- Conducted fine-tuning of pose detection algorithms from open-source GitHub repository
- Ported both algorithms on Jetson Nano microcomputer using C++
- Wrote and presented the final report to the founders, facilitating the use of Jetson Nano in the application and limiting the use of the cloud

EDUCATION DETAIL

FPMs-UMons 2018 – 2020 Master in Engineering - Computer Science and Management

Specialization in Artificial intelligence and Data science – magna cum laude

Thesis: "Detection of stress in the wild using non-invasive data collection devices"

INHA Korea, 2020

Visiting Scholar – Department of Computer Science and Information Engineer

FPMs-UMons 2015 – 2018 **Bachelor in Civil Engineering**