Esther Sun Young CHOI

Machine Learning Engineer

Applying for a ML Engineer position starting in June 2025

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Work experience

March 2023 –
Surromind
Machine Learning Engineer

Modelling, Software Development, Research

Education

2021 – 2023
Sorbonne University
Paris, France

MSc Data Science
Machine Learning, Deep Learning, Computer Vision, Reinforcement Learning, NLP, Symbolic AI, Business Intelligence, Database Systems

2018 – 2021
Sorbonne University
Paris, France

BSc Double Major in Mathematics and Computer Science
Data Structures and Algorithms, Databases, Cryptography, Logic, Automata Theory Probabilities, Calculus, Algebra, Topology, Numerical Analysis, Functional Analysis

2015 – 2018
Lycée Victor Duruy
Paris, France

Baccalauréat of Science, IT option
High School Diploma obtained with Highest Honors

Communication skills

French	Native speaker
Korean	Mother tongue, bilingual
English	Proficient, CAE 182 pts

Activities

- Board member of ALIAS, the official student association of Computer Science of Sorbonne University
- Board member of ASCoF, the Association of Korean Scientists living in France
- Sports : Tennis, Archery, Hiking
- Hobbies : Video games, Guitar

Interests

- AI for Healthcare, Computer Vision
- Computer Ethics, eXplainable AI, Human Computer Interaction

Projects

Image as a set of points (Jan 2023)
- (Work in progress) Implementation of the article Image as a set of points (2022)
- Image classification using a new paradigm of visual representation : Context Clusters
- Tech : Python, PyTorch
- Topics : Deep Learning, Image processing, Representation Learning

Image processing using CNN (Aug 2022)
- Training convolutional neural networks to perform image classification and image segmentation
- Tech : Python, PyTorch
- Topics : Computer Vision, Deep Learning

Novelty Search (Dec 2022 - Jan 2023)
- Implementation of the article Evolution of Swarm Robotics Systems with Novelty Search (2013)
- Combining Novelty Search and NEAT to overcome the problem of deception in evolutionary computation
- Tech : Python, neat-python, Pygame
- Topics : Evolutionary robotics, Swarm Robotics

Generation of Contrastive explanations (March - May 2022)
- Implementation of the article Contrastive Explanation : A Structural-Model Approach (2020)
- Automatic generation of contrastive explanations (answers to counterfactual questions of the form 'Why P rather than Q ?' when discussing the result of an algorithm) using causal graphs
- Tech : Python
- Topics : eXplainable AI

Computer skills

Programming	Python, SQL, C, JAVA
Frameworks	PyTorch, Tensorflow, Keras, OpenCV, Scikit-learn
Libraries	Numpy, Pandas, Matplotlib
Tools	GIT

Strengths

- Quick learner with good grasping ability.
- Action-oriented and result-focused.
- Easily collaborate with team members.
- Logical but creative thinking.