

Iman Malik

Issy-Les-Moulineaux, France
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I am a machine learning engineer and scientist. I am undergoing artistic training to experiment on multi-disciplinary projects. I am always looking for challenging freelance work.

WORK EXPERIENCE

 **WILLOWS AI** **Issy-Les-Moulineaux, France (Remote)**
Oct 2022 – Present
Machine Learning Engineer / Scientist

- I am co-leading the research and development of vision models for improving the generalisability and performance of anomaly detection models for manufacturing factories. I am consulting for clients in this industry. My research contributions have significantly improved the robustness of our models for out-of-distribution settings.
- **Tooling:** *Detectron2, PyTorch, OpenCV, Python, Bash, Jupyter, NumPy, Pandas, Scikit-learn, Git*

 **FREELANCE** **Issy-Les-Moulineaux, France (Freelance)**
Oct 2022 – Present
Artist and Machine Learning Engineer / Scientist

- I am currently contracting for companies and artists to provide technical and artistic solutions. I specialise in creative technologies and artificial intelligence.

 **ELEMENT AI** **Montréal, Canada (On-site)**
March 2018 – Oct 2020
Machine Learning Engineer / Scientist

- I worked as a machine learning engineer and scientist within several small teams and produced deliverables for client projects.
 - Dataset Augmentation
 - I worked on the research and development of GANs to produce images for data-scarce training setups. My research contributions improved the performance of our machine learning pipelines significantly.
 - Uncertainty Quantification
 - I led the uncertainty quantification research for our products. I developed a novel algorithm for estimating the uncertainty of vision model pipelines. A patent was later published for this work.
 - Spectrospace
 - I developed a web application for generating spectrograms for music sample generation using the research I published during my time at university. I later ported my work to Magic Leap for an augmented reality experience. This work was demoed to incoming clients
- **Tooling:** *Tensorflow, PyTorch, OpenCV, XGBoost, Pandas, NumPy, Javascript, HTML/CSS, Git, Unity, C#, CUDA, Scikit-learn, Keras, Docker, Flask, Amazon Web Services, Bash.*

EDUCATION

ÉCOLE NATIONALE SUPÉRIEURE DES BEAUX-ARTS DE PARIS **Paris, France**
2022 - Present
Bachelor of Fine Arts

MONTRÉAL INSTITUTE OF LEARNING ALGORITHMS **Montréal, Canada**
2021 - 2021
Ph.D in Computer Science (Unfinished)

- **Supervisor:** Hugo Larochelle

UNIVERSITY OF BRISTOL **Bristol, United Kingdom**
2013 - 2017
Bachelor and Master of Engineering in Computer Science

- **GPA:** 4.0 / 4.0 (First Class Honours)

- **Relevant Coursework:** Machine Learning, Image Processing and Computer Vision, Robotic Systems, Learning in Autonomous Systems, Cloud Computing, Web Technologies, High Performance Computing, Computational Bioinformatics, Software Product Engineering, Character and Set Design, Computer Graphics, Human Computer Interaction

PUBLICATIONS

MALIK I & EK C

Neural Translation of Musical Style
NeurIPS Machine Learning for Creativity and Design Workshop 2017

[arXiv:1708.03535](#)

BODIN E, MALIK I, CAMPBELL N. & EK C

Nonparametric Inference for Auto-Encoding Variational Bayes
NeurIPS Approximate Inference Workshop 2017

[arXiv:1712.06536](#)

PATENTS

MALIK I, MELANCON, G, GHARBIH, W, SNELGROVE

Method of and server for training a machine learning algorithm for estimating uncertainty of a sequence of models

[CA 3066337](#)

TALKS

MONTRÉAL ALL-GIRL HACK NIGHT

Invited Speaker
Talk on "AI + Music".

PYDATA CONFERENCE (WARSAW 2017)

Invited Speaker
Talk on "Neural Translation of Musical Style".

COMSM0018 DEEP LEARNING UNIT (BRISTOL)

Invited Speaker
Talk on "Neural Translation of Musical Style".

SKILLS, ACTIVITIES & INTERESTS

Languages: Fluent in English and Urdu; Professional Proficiency in French,

Other Technical Skills: C/C++, Java (+ Android), Agile, Scrum, Adobe Creative Cloud, OpenMP, OpenMPI, Matlab, OpenCL, Latex

Activities: Equality and Diversity Officer of the Computer Science Society, Dancer at the Bollywood Dance Society

Interests: I am an artist in my free time. I like to produce sculptures and films for installations.