Marvin Martin (He/Him/His)

Machine Learning Engineer

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EDUCATION

Boston University
Boston, MA
M.Sc. in Computer Information Systems   01/2021-09/2021
- Major: Data Analytics, GPA 4.0
- Relevant Coursework:
  Analysis of Algorithms, Big Data Analytics,
  Advanced Programming Techniques,
  Machine Learning, and Deep Learning.

Ecole Centrale d'Electronique
Paris, FR
M.Sc. in Computer Information Systems   09/2018-12/2020
- Major: Data Science, Grade A (Top 5%, 16.8/20)
- Relevant Coursework:
  Advanced Database, DevOps, Web Development,
  Cloud computing, Mathematics for Data Science,
  Calculus, Algebra, Physics, and Signal Processing.

INSEEC London
London, UK
B.Sc. in Computer Science   01/2019-05/2019
- Relevant Coursework:
  Java, Probability and Statistics, and Public Speaking.

Heriot-Watt University
Edinburgh, UK
B.Sc. in Computer Science   01/2018-06/2018
- Relevant Coursework:
  Electronics, C Language, and Business Management.

EXPERIENCE

Vic.ai
New-York, NY, USA
Machine Learning Engineer   11/2021-Present
Vic.ai builds AI-based autonomous accounting systems.
- Modeling Gradient Boosting, Transformers and LLMs.
- Build Projects like PO Matching, Invoice Coding, OCR.
- ML Infrastructure (Lambda, SageMarker, Kubernetes).
- Data Engineering, Feature Engineering at scale (Ray).
- Support +20,000 models training bi-weekly (+800%).

Centre Securité Requin (CSR)
Réunion, FR
Machine Learning Engineer Consultant   11/2020-Present
CSR is a public research center that studies shark attacks.
- Build Neural Network for underwater shark classification.
- Research related to Adversarial Domain Adaptation.
- Create pipelines using Nifi to classify videos in real time.
- Investigate model reliability based on weather conditions.

Heuritech
Paris, FR
Training Data Operator Intern   04/2020-08/2020
Heuritech builds visual recognition and trend forecasting
technologies for fashion industry.
- Ran data engineering tasks to improve datasets.
- Trained Deep ConvNets.
- Active Learning research on acquisition functions.
- Training metrics investigation.

Lectra, Innovation Lab
Bordeaux , FR
Lab Intern   05/2019-06/2019
Lectra develops systems for the textile industry.
- Explored Generative Adversarial Network for fashion.

LINKS

LinkedIn   Github   Medium   Website

PUBLICATIONS

In progress: ADA-Shark: A framework for shark detection employing underwater cameras and domain adversarial neural network (Boston University & CSR).

PROJECTS

Domain adversarial neural network [Report] [Code]
Reproducibility study of the DANN and MADA papers using PyTorch-Lightning.

PySpark neural network from scratch [Article] [Code]
Spark implementation of a shallow neural network to classify handwritten digits. Gradients are computed via MapReduce.

Emotion based Art Generator [Article] [Code]
Conditional generative adversarial neural network (CGAN) trained to generate 64×64 painting images for a selected style and emotion.

Neural Network from Scratch [Article] [Code]
Mathematics and Numpy code behind 3 Layers Neural Network.

CERTIFICATIONS

- Generative AI with Large Language Models
- Generative AI Fundamentals
- Workera Software Engineer Deep Learning Assessment
- Deep Learning Specialization
- GANs Specialization

SKILLS

- **Languages**   Python, Java, Bash, R, C, JavaScript.
- **ML Libraries** PyTorch, Keras, HuggingFace, PEFT, LangChain, OpenAI, Skit-Learn, Wandb, DVC, OpenCV, Pinecone, MLlib.
- **Monitoring**   Sentry, Datadog, Grafana, Zabbix.
- **Deployment**   Docker, Terraform, Kubernetes, AWS, Git-flow, Circle-ci.
- **Cloud**   AWS (SageMaker, S3, Lambda, Batch, ECS, EFS, SAM), GCP, Ray.
- **Databases**   PostgreSQL, Redis, MongoDB, Firebase.

LANGUAGES

English: Fluent   **French**: Native   **Spanish**: Novice

ACTIVITIES & LEADERSHIP

Comedian, Stuntman: Performed in Timéo in front of 1000 people, 3 times a week as a skateboarder (2016).
Sports: Skateboard (Instructor), Surf, and Slackline.
Achievements: 300km in 3 days on a longboard.