Marvin Martin (He/Him)

3+ years of Machine Learning Experience

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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:

C Language, Advanced Database, DevOps, Web Dev, Cloud computing, Mathematics for Data Science, Calculus, Algebra, Physics, and Signal Processing.

INSEEC London

B.Sc. in Computer Science

London, UK 01/2019-05/2019

Heriot-Watt University

B.Sc. in Computer Science

Edinburgh, UK 01/2018-06/2018

EXPERIENCE

Vic.ai (Startup - Series C) New-York, NY, USA Machine Learning Engineer 11/2021-Present

<u>Vic.ai</u> builds AI-based autonomous accounting systems.

- Leveraging Large Language Models (LLM) for accounting.
- Natural Language Processing (NLP) tasks.
- 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 Securite Requin New-York, NY, USA Machine Learning Engineer Consultant 11/2020-Present CSR is a public research center that studies shark attacks.

- Computer Vision (CV) for shark classification task.
- Build Deep Neural Network for underwater (CNN/ViT).
- Research related to Adversarial Domain Adaptation.
- Create pipelines using Nifi to classify videos in real time.
- Investigate model reliability based on weather conditions.

Heuritech

Lab Intern

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 05/2019-06/2019

Lectra develops systems for the textile industry.

• Explored Generative Adversarial Network for fashion.

LINKS

<u>LinkedIn</u> <u>Github</u> <u>Medium</u> <u>Website</u>

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, Trans-
	formers, PEFT, LangChain, OpenAI,
	LLama-Index, Skit-Learn, Wandb,
	DVC, OpenCV, CatBoost, PySpark.

• Monitoring Sentry, Datadog, Grafana, Zabbix.

• Deployment Docker, Terraform, Kubernetes, AWS, Git-flow, Circle-ci.

• Cloud AWS (SageMaker, S3, Lambda, Batch, ECS, EFS, SAM), GCP, Azure, Ray.

 Databases PostgreSQL, Redis, MongoDB, Firebase, Chroma, Pinecone.

• Communication Leadership, Public-Speaking, Scrum, Jira, Cross-Team communication.

LANGUAGES

English: Fluent French: Native Spanish: Novice

ACTIVITIES & LEADERSHIP

Comedian, Stuntman: Performed in Timeo 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.