Maryam Pour

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Experience

Senior Machine Learning Engineer

XGenAI – **Sep 2022 - present** – ***Remote***

- Designed and deployed a ***GenAI multi-agent chatbot*** for fashion recommendation using an agentic architecture. Integrated ***RAG*** for dynamic knowledge retrieval and Langfuse for observability. Mapped agent workflows and engineered prompts across Claude and OpenAI models for task-specific interactions. Built ***CI/CD pipelines*** for automated testing, deployment, and iteration, improving system reliability and reducing latency in user response times.
- Developed a ***semantic search engine*** using domain-adapted CLIP, fine-tuned on fashion ***image-text pairs*** via contrastive learning to enhance cross-modal embedding alignment. Enabled a 25% increase in conversion rates across clients, including ***Coach, Marc Jacobs, Valentino, and Armani.***
- Built and deployed a Complete-the-Look service combining ***instance segmentation, multi-modal retrieval, and vision tagging***. Trained a model to segment lifestyle images into fashion items, CLIP to tag segmented regions by category, and ***Google Vision AI*** for image-based matching. Enabled precise product retrieval and outfit recommendation, driving measurable revenue lift for fashion clients.

Data/Machine Learning Engineer

LocalIntel, – **Sep 2020 - Sep 2022** – ***Calgary, Canada***

- Architected and optimized ***ETL data pipelines*** feeding multiple analytics applications, resulting in a 30% improvement in data processing efficiency and a 25% reduction in latency.
- Built custom NLP and Computer Vision platforms to automate insights and UI validation: leveraged GPT-3 to generate ***natural language summaries*** for client dashboards, boosting user engagement by 40%, and developed a TensorFlow-based ***image similarity system*** for automated screenshot testing, cutting QA time by 50% and improving UI consistency.

Machine Learning Engineer Intern

AltaML, – **Jan 2021 - Mar 2021** – ***Calgary, Canada***

- Extracted data modules using data mining techniques, enhancing ***network diagram*** accuracy by 25% and reducing processing time by 40%.
- Developed a ML module similarity technique with ***Graph Neural Networks*** to optimize rule application, improving consistency by 35%.

Machine Learning Engineer Intern

HEIG-VD, – **Feb 2018 - Jun 2018** – ***Lausanne, Switzerland***

- Developed an ***NLP-based chatbot*** to analyze real-time user data and provide personalized skincare solutions, using KNN and Word2Vec to identify clusters and grouping the responses given a question.

Education

- **Master of Science in Computer Engineering** — **University of Calgary** — *Aug 2018-Sep 2020*
- **Bachelor of Science in Computer Science** — **University of Tehran** – *Aug 2013- Sep 2017*

Python (+8y) TensorFlow, PyTorch	Pandas, OpenCV, HuggingFace	LangChain, LlamaIndex, GPT, Claude, Llama3	DynamoDB, PostgreSQL, Neo4j	AWS, GCP, ElasticSearch, Airflow	Git, Docker, GitHub Actions, Jenkins, GitLab	CI/CD, Flask App, FastAPI, Power-BI

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