Audrey-Anne Guindon

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SUMMARY

- Full-stack Data Scientist with 3+ years of experience in machine learning.
- Strong track record of leading complex data science projects and delivering results.
- Solid theoretical knowledge of machine learning and statistics.
- Experience in Python, Spark, PyTorch, sklearn, NLTK, SQL, Hive, Presto, Flink, Ray.

EXPERIENCE

Senior Data Scientist, Risk • Shopify — Montreal, QC • Feb 2022 - Present
- Built and deployed machine learning models to detect fraud activity in real time across payment products.
- Championed the migration of our model training and batch inference from Spark to Ray.
- Introduced improvements in label encoding, hyper-parameter optimization, and model architecture.
- Worked on the development of probabilistic buyer identity graphs to help detect fraud rings.
- Helped engineers across the company to consume our models, score and artefacts.
- Participated in design reviews with peers and data engineers to decide amongst available technologies.
- Guided technical direction for the team based on business goals and created effective feature roadmaps.
- Championed the entire analytics process for the launch of our chargeback protection product (ETLs, reporting, forecasts).
- Designed, conducted, and interpreted A/B experiments and actively influenced the direction of our products.

Data Scientist, Payments • Shopify — Montreal, QC • May 2020 - Feb 2022
- Identified, scoped and owned ambiguous complex projects with cross-functional partners and high business impact.
- Lead team of 3 data scientists in building efficient and scalable ETLs and dashboards to provide analysts with pricing insights, helping to secure commercial contracts worth millions of dollars.
- Provided mentorship to team members, created onboarding documents, and conducted interviews.

Graduate Research Assistant • HEC Montréal — Montreal, QC • Sep 2019 - May 2020
- Contributed to an R package and paper for predictive inference of travel time in transportation networks.

Data Science Intern, Shipping • Shopify — Ottawa, ON • Jan 2019 - Sep 2019
- Developed a demand forecasting pipeline based on RNNs to serve our warehouse inventory allocation system.
- Collaborated with engineers to develop tools for box packing optimization.

Undergraduate Research Assistant • SUNLAB — Ottawa, ON • May 2019 - Jul 2019
- Conducted experiments comparing different techniques for quantifying the risk of solar energy projects.
- Co-authored paper accepted in the Renewable and Sustainable Energy Reviews journal.

EDUCATION

MSc Data Science and Business Analytics • HEC Montréal — 2019 - 2022 *(expected)*
- NSERC Canada Graduate Scholarships, $17,500
- Thesis: "Decision-Focused Learning for Multi-Stakeholder Recommender Systems"

Honours BComm MIS and Analytics • University of Ottawa — 2015 - 2019
- Graduated *magna cum laude*

PROJECTS

Hackdays • Shopify — Oct 2021
- Used deep learning techniques to combine image and product conversion attributes to measure product image quality.

PrideHacks • QueerTech — Aug 2021
- Built a directory of mental health services using Postgres, Ruby on Rails, and Elasticsearch.

Hackdays • Shopify — Jul 2021
- Built "Shop The Look" feature using an object detection model that enabled users to find and buy products within an image.

Reproducibility Challenge • NeurIPS — 2019
- Replicated experiments described in the paper "Exact Combinatorial Optimization with Graph Convolutional Neural Networks" and performed ablation studies to investigate the performance of the AI system (CUDA, TensorFlow).

TRAINING

- **Data+AI Summit** Deploying Machine Learning Models — San Francisco, CA • Jun 2022
- **CIFAR** Deep Learning + Reinforcement Learning Summer School — Remote • Jul 2021