Archie Dobiss

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RELEVANT EXPERIENCE

SoundCloud (Musiio)   *London, UK*
Solutions Engineer   **July 2022 - March 2023**

- Supported clients with Musiio AIAAS API integration using Python, consistently received positive feedback for clear guidance and swift troubleshooting.
- Designed a workflow diagram to align API implementation with pricing, eliminating accidental overuse.
- Drafted Tag API documentation, hosted on Confluence, reducing the number of client queries.

Musiio (Acquired by SoundCloud)   *Singapore (Remote)*
Freelance Software Engineer   **August 2021 - November 2021**

- Optimised Python API wrappers for enhanced song metadata flexibility.
- Labelled datasets for autotune and vocal quality, adhering to precise definitions to ensure classifier accuracy.

Kobalt Music, London, UK   *July 2013 - July 2020*
Royalties Distribution Manager (Music Publishing)   **July 2018 - July 2020**

- Utilised seasonality, event-driven insights, and sample analysis to forecast processing needs, ensuring consistent performance during volume fluctuations.
- Designed and implemented rule-based royalty mapping models, using insights from previous roles, achieving accurate matches for over £500k of previously unallocated funds.
- Constructed complex file importers from external specs and oversaw metadata migrations across import formats and tables, ensuring data integrity.

Assistant Royalties Processing Manager (Music Publishing)   **July 2016 - June 2018**

- Conducted daily EDA on 10+ million row datasets using SQL, focusing on range, outliers, and distributions. Leveraged insights to refine ETL algorithms, achieving 80%+ automation in mapping benchmarks.
- Pre-processed vital metadata for over 100k copyrights, eliminating redundancies and optimising structures for import, reducing manual workload by 40%.

PROJECTS

- **Logic Gates with ANN:** Designed AND, OR gates using NumPy and Perceptron, emphasising problem-solving and decision-making. Deepened core principle implementation in Python through decision boundary exploration. [Link to Portfolio]
- **AI Bootcamp Spam Filter:** Chose XGBoost for sparse, unbalanced dataset. Applied weighted loss and L1 regularisation for security and overfitting minimisation respectively. Achieved 92% precision and 99% recall. [Link to GitHub]
- **Audio Resampling Webservice (Interview Test):** Built an asynchronous FastAPI service in 10 days, starting with no prior knowledge of webservices or asynchronicity, earning positive feedback and subsequent hiring. [Link to GitHub]

EDUCATION

- **AI Bootcamp, University of Huddersfield, UK** (March 2022) - Data pre-processing, model evaluation, GLMs, SVMs, ensemble learning, clustering, dimensionality reduction, NLP; theoretical case study on dialogue system integration in healthcare order fulfilment and patient triage; growth mindset.
- **Foundational Math:** Self-studied Algebra II, Pre-Calculus on Brilliant.org (Jan-Jul 2023) for advanced Calculus and Linear Algebra.
- **AI Self-Study:** ANNs course on Brilliant.org (Aug 2020-Jul 2021); learned architectures and backpropagation.
- **BA Hons in Advertising and Marketing Communications, University of Bedfordshire, UK** (2008).

SKILLS

- **Technical:** Python, SQL, BigQuery, NumPy, Pandas, Matplotlib, Scikit-learn, NLTK, FastAPI, Git Bash, AWS S3.
- **Data:** EDA, ETL, Forecasting, Binary Classification, Data Wrangling.