https://www.linkedin.com/in/nickwreeves

## **Data Scientist**

Data Science • Software Development • Business Intelligence • AI + ML • Digital Signal Processing
Early career Data Scientist with 3+ years of experience designing analytics and data science projects to identify, organize, and deliver outcomes for the business, including experimental design, statistical modeling, and KPI dashboarding.

- Proven technical leader skilled at developing processes and systems that convert large amounts of data into actionable insights to improve business performance.
- Able to deliver end-to-end technology solutions using Python that contribute directly to the bottom line.
- Able to work cross-functionally with internal and external stakeholders, translating requirements from non-technical partners to realized analytics architectures, dashboards, and data visualizations.
- Outstanding technical, analytical, mathematical, programming, and communication skills.

#### **EXPERTISE**

Skills:	Data Science, Machine Learning, Artificial Intelligence (AI), Data Analysis, Business Intelligence, Software Engineering, Statistical Modeling, Statistical Testing, Data Visualization, Metric Design, Experiment Design, ETL pipeline development, Data Engineering, Project Management
Programming Languages:	Python, SQL, R, C++, JavaScript, Java; Python Tools: PyTorch, TensorFlow, PySpark, SciPy, Pandas, NumPy, Matplotlib, scikit-learn
Business Intelligence:	Tableau, Snowflake, SQL Server, SAP Hana, Airflow, AWS Lambda, Salesforce, SAP, Oracle, Marketo
MLOps and Big Data:	Git, Docker, Terraform, AWS SageMaker, Hadoop, Spark
Website:	https://n-reeves.github.io/

#### **WORK HISTORY**

#### **Full Time Student**

## Queen Mary University of London, London, UK – 9/2023 – 12/2024

MS student studying machine learning, AI, software engineering, and signal processing with the Centre for Digital Music.

#### **Data Scientist**

### Intuitive Surgical, Inc., Sunnyvale, CA – 12/2022 – 8/2023

Intuitive Surgical, Inc. is an American biotechnology company that develops, manufactures, and markets robotic products designed for minimally invasive surgery, such as the da Vinci Surgical System.

- Saved hundreds of work hours for data scientists by enabling analysis of the relationship between the customer lifecycle and product adoption
- Drove \$200k+ in annual revenue growth by creating and presenting customer-facing sales materials using experiment design, statistical modeling, causal inference, and data visualization
- Improved client relationships by developing a Python-based product analytics tool that automates observational studies, providing customers with deeper insights in less time
- Delivered a \$100k project with 1000+ stakeholders by leading a team of three analysts and engineers. Developed a data model, ETL pipelines, and dashboards using Tableau, Python, and Snowflake

### **Insights Analyst**

## Intuitive Surgical, Inc., Sunnyvale, CA – 11/2020 – 12/2022

- Improved efficiency and reduced work hours across five teams by automating manual processes needed to reconcile the data contained in regular reports, providing sales leadership and C-Suite with real-time visibility of sales pipelines
- Saved over \$250k annually by automating the management of sales contracts with Python-based SQL pipelines and dashboards used by 500+ employees, including the C-suite
- Won an analytics competition with 700+ participants and saved 200+ hours for the data science team by leading a team of three BI analysts in a data warehouse development project
- Saved more than 300 hours annually by developing ad-hoc data pipelines, KPIs, and data visualizations for finance, sales, and marketing teams

### **Data and Reporting Analyst**

### **Solutran, Plymouth, MN – 6/2020 – 1/2021**

Solutran is a fintech platform providing consumers with a payment system to instantly receive benefits using a card or mobile app at the point of sale.

- Improved customer satisfaction by 20% by developing an R script to automate high-value SLA reporting for customer service records, integrating statistical tests to demonstrate to clients how new initiatives drove consistent overperformance
- Strengthened relationship with the customer that purchased the company in 2021 by developing a set of KPIs and reports that measured product engagement

#### **EDUCATION**

#### Master of Science (M.Sc.), Sound Computing, Queen Mary University of London, London, UK

Specialization: Machine Learning and Data Science, GPA: 4.0

Coursework: Machine Learning, AI, Big Data Processing, Information Retrieval, Signal Processing, Sound Perception, Deep Learning

## Bachelor of Arts, Mathematics, Carleton College, Northfield, MN

Specialization: Statistics and Computer Science, GPA: 3.6

Coursework: Regression Modeling, Experiment Design, Data Science, Probability, Linear Algebra Software Design, Algorithms, Calculus, Bayesian Statistics, Statistical Modeling

#### **PROJECTS**

## AI-based Speech Enhancement and Source Separation

Designed and trained a deep learning model to enhance speech quality by removing background noise and reverberation in multi-speaker audio. The model was effective in real-world settings and acted as a preprocessor for a source separation network that isolated individual speakers into separate channels.

- Successfully constructed novel AI architecture that worked with real data
- Technologies: Python, Tensorflow, Pytorch, Numpy
- Technical Skills: Python Programming, Machine Learning, Deep Learning, Artificial Intelligence, Speech Enhancement, Signal Processing, Source Separation

# **Generative AI Model for Audio Synthesis**

Implemented a generative AI model to recreate various guitar tones using differentiable DSP synthesizers, producing realistic instrument sounds through neural networks.

- Produced conference quality paper and directly informed project strategy for a PhD. candidate researching generative audio for guitar
- Technologies: Python, Tensorflow, Pytorch, Numpy
- Technical Skills: Python Programming, Machine Learning, Deep Learning, AI, Generative Audio, Signal Processing, Music Transcription

## Machine Learning Consulting with Cornell Lab of Ornithology

Collaborated with researchers and software engineers at Cornell to implement and test advanced machine learning models for bird call recognition and population monitoring.

- Optimized geospatial machine learning model used in the Merlin and Ebird applications
- Ongoing project awaiting results
- Technologies: Tensorflow, Python, Pandas