AOIFE MCDONAGH

DATA SCIENTIST

DETAILS

PHONE
+1 512 679 0539

EMAIL
aoifemcdonagh.ai@gmail.com

NATIONALITY
United States, Ireland

TOP SKILLS

Python, Java, SQL

Linux, Docker, AWS, Snowflake

ML Frameworks: Tensorflow, Keras, Scikit-learn

Rapid prototyping of early-stage research

Delivering patentable IP

LINKS

LinkedIn

GitHub

aoifemcdonagh.com

LANGUAGES

English
● ● ● ● ●

German
● ● ● ● ○

Irish
● ● ○ ○ ○

PROFILE

- **Machine Learning -** Demonstrated skills in applying ML techniques to analyze and interpret data using programming and statistical software.
- **Python, SQL -** Expert in use of Python with considerable experience utilizing it for analysis tasks. Confident using SQL for data retrieval and manipulation.
- **Product development -** Experience in product research, IP patenting, and bringing ML products into production.

EMPLOYMENT HISTORY

Data Scientist, OneDrop
Austin, TX

Jun 2021 — May 2022

- Productionized a reinforcement learning powered decision system for delivering data logging prompts to OneDrop app users.
- Wrote API for handling requests to data science powered app features.
- Trained time-series cluster model on user logging data to decide content shown in app features.
- Co-inventor on patent application filed on chat-bot food logging system.

Skills: Reinforcement Learning, NLP, AWS, Mixpanel, Snowflake, SQL, Python, Git

R&D Engineer, Farmeye
Remote, Ireland

Jul 2020 — Feb 2021

- Developed a convolutional neural network based system for segmenting agricultural fields from Sentinel-2 satellite imagery.
- Wrote Windows application to automate the creation of field boundary maps in Python and QGIS. Reduced map creation time from 3+ hours to 30 minutes.
- Expanded features of 'SoilMate' Android app (used by 100+ contractors).

Skills: Python, Keras, Java, Docker, QGIS, Android, Bitbucket, Computer Vision

R&D Engineer, Xperi
Galway, Ireland

Sep 2017 — Dec 2019

- Developed computer vision method of estimating room acoustic properties. Achieved through CNN image segmentation based on material classification.
- Investigated use of GANs for generating novel sound effects.
- Co-inventor on two patent applications related to above work.
- Developed Python toolkit for managing and processing large (1TB+) audio database. Reduced data acquisition process from several weeks to 2-3 days.

Skills: Python, Tensorflow, Caffe, OpenCV, Jupyter, Linux OS, Image Segmentation

EDUCATION

Masters of Engineering Science (MEngSc), National University of Ireland, Galway
Galway, Ireland

Sep 2017 — Dec 2019

- Conducted research on CNN & GAN applications to audio processing.
- Presented "Synthesizing Game Audio Using Deep Neural Networks" at IEEE GEM conference in 2018.

Bachelors of Engineering (BEng), National University of Ireland, Galway
Galway, Ireland

Sep 2013 — Jun 2017

1st Class Honors (74%) (Equivalent GPA > 3.68)