

Ryan Muraglia

 Address 7249 York St, Dexter, MI 48130
 Phone (310) 940 8613
 Email rmuraglia@gmail.com
 LinkedIn [/in/ryan-muraglia](https://in.linkedin.com/in/ryan-muraglia)

SUMMARY

Data scientist with 5 years of experience developing, deploying and maintaining machine learning models with terabyte-scale streams of big data. Proven track record of delivering business value with both classic data science and analytics, as well as with modern deep learning methods. Strong communicator excels in leadership roles, but also flourishes in independent and collaborative technical roles. Passionate about establishing best practices and processes for rigorous and reproducible science.

WORK EXPERIENCE

Meta (formerly Facebook) Ann Arbor, MI (remote)
Data Scientist, Senior Level October 2021 - Present

- Established metrics and strategy for *Integrity Rule Engine* systems, responsible for processing **trillions of events per day** to detect violating content with **99.9+%** system reliability.
- Drove a major cross-functional and cross-team initiative to create foundational data infrastructure for **source of truth** metrics reporting and analysis across disparate integrity systems, enabling **unified, reproducible and robust insights**.
- Saved **\$5M** in annual operating costs by improving **value attribution** methodology to identify underperforming detection rules, and collaborating with rule owners for remediation.
- Developed prioritization and efficiency measurement framework for rule engine system consolidation.

Yahoo! (formerly Oath, Verizon Media) Champaign, IL
Data Scientist II, Brand Data team lead April 2019 - October 2021
Data Scientist I January 2017 - March 2019

- Implemented a **deep learning model** and PySpark pipeline for automated retraining and deployment of a **named entity recognition** system, processing over **100M records/day**.
- Prototyped applications of *Brand Data* for adoption by partner teams in sales and targeting, including customer segmentation and churn analysis (**clustering**), brand search topic association (**topic modeling**), and polarized content engagement (**sentiment analysis**)
- Demonstrated a leading and innovative spirit, with a **100% success rate** (3/3 years) in accepted submissions to Yahoo's annual internal technical conference

EDUCATION

Duke University, Durham, NC August 2012 - August 2016
M.S., Computational Biology & Bioinformatics (CBB)
University of Michigan, Ann Arbor, MI September 2007 - April 2011
B.S., Microbiology; Academic Minor, Physics

TECHNICAL SKILLS AND PROFICIENCIES

Primary Languages	Python, R, SQL (Hive, Presto), Shell (Bash)
Common Libraries	pandas, scikit-learn, PySpark, TensorFlow 2, PyTorch, tidyverse
Classic Data Science	Regression and Classification (Linear models, Tree models, Ensembles) Clustering (e.g. k-means), Anomaly Detection (esp. time series)
Deep Learning	Feedforward networks, Convolutional networks (CNN), Recurrent networks (LSTM), Attention networks (Transformers)
Additional Tools	Git, Hadoop, Make, Dashboarding (Shiny, Flask, Looker)