Charlie Guthrie

Data scientist and visualization engineer

charles.d.guthrie@gmail.com
charlieguthrie.com
linkedin.com/in/guthriecharlie

WORK

Coursera
Sr. Data Scientist
Jan 2022 - Present

- Automated reporting to estimate ROI of TV campaigns using statistical model to predict lifetime value; team achieved 187% ROI.
- Developed automation to empower email marketers to define audiences through self-serve tooling. Cut support required from data scientists in half.
- With marketing teams, brought in over 300k new paying learners.
- Defined company-wide key performance indicators for measuring top-of-funnel growth.
- Drafted more effective new hire onboarding process.
- Built holdout group for measuring email campaign performance.

Udemy
Sr. Data Scientist
Apr 2019 - Jan 2022

- Founded and led Experiment Review Council in Jan 2021, overseeing 150+ experiments in 2021; which in turn generated over $21M in annualized lift.
- Built system for identifying and removing bots from experiment results. Up to 60% of traffic had been bots, which was blocking experiment analysis.
- Defined metrics for learning engagement, a company-level KPI; built model to study drivers, achieved 11% YoY increase.
- Led project to incentivize instructors to make courses more interactive.
- Revamped new hire onboarding process.

Facebook
Data Scientist
Jul 2017 - Mar 2019

- Developed accuracy measurement for Facebook's content moderation systems, which remove porn, hate speech, etc. from 40M posts per month. Reduced error by 40% in a year.
- Determined sampling distribution and headcount requirements for body of expert moderators who judge the accuracy of 15,000 content moderators.
- Developed model to identify ambiguous cases, which realigned team to focus on improving accuracy in more actionable, straightforward cases; this led to creation of the Oversight Board.

New York Times
Data Vis Engineer
May 2013 - Jun 2015

- Broadly expanded data literacy, access, and decision-making by developing custom interactive visual dashboard in D3.js, used for business intelligence analytics across 10+ departments, including finance & advertising.

EDUCATION

See projects at charlieguthrie.com

New York University
Sep 2014 - May 2017

MSc Data Science
- Coursework included Statistics, Deep Learning, Machine Learning, Big Data, Inference, Natural Language Processing, and Algorithms

Dartmouth College
Sep 2003 - Jun 2007

B.A. Mathematics
- Coursework included Mathematical Statistics, Modeling, CS

SKILLS

Data Science
- SQL, Hive ETL; Analysis in Python (Pandas, NumPy, SKLearn), R, Excel.

Data Vis / Front-end
- HTML, CSS, Javascript, specializing in D3 and JQuery.

Other
- Shell scripting; French; Comics at instagram.com/charlesdguthrie