# Oliver Spohngellert

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# **WORK EXPERIENCE**

### **PEACOCK | SENIOR DATA SCIENTIST**

Nov 2022 - Present | New York, NY

- Researched & productionalized content clustering using 2 years of Peacock viewing data (> 10 TB). Clusters used throughout the organization for all marketing, targeting, recommendation efforts (GCP, BigQuery, scikit-learn, Airflow).
- Developed methodology for assigning users to content clusters, accounting for cluster sizes and types (GCP, matplotlib).
- Architected system for inserting new content into existing clusters on an ongoing basis (BigQuery, Airflow).
- Designed & deployed customizable user migration dashboard visualization tool (Streamlit, App Engine, Plotly, Docker).
- Devised directional content affinity metrics based on Market Basket analysis, used to drive high level strategic decisions.
- Onboarded, mentored, and managed an intern; taught best practices and managed tasks.
- Managed relationships with key stakeholders, presented data for a range of technical expertise, updated team processes.

#### MAJOR LEAGUE BASEBALL | MACHINE LEARNING ENGINEER

May 2021 - Oct 2022 | New York, NY

- Built end to end classifier for live official scoring of MLB plays in game at 95% accuracy (scikit-learn, seldon, BigQuery).
- Deployed a personalized video recommendation system API for top hitting, pitching, and fielding plays. Used Logistic Regression and Feed Forward Neural Networks to build ranking system (GCP, scikit-learn, kubernetes, argo workflows).
- Developed algorithms for comparing player batting stances with user stances submitted via image (MediaPipe, FastAPI).
- Researched zip code based team affinity using historical article view data (Jupyter, BigQuery).
- Implemented time series classification on skeletal data to determine whether a batter attempted a checked swing.

## **DEEP HEALTH | Machine Learning Intern**

May 2020 - Aug 2020 | Cambridge, MA

- Designed an error analysis pipeline, enhancing understanding of Cancer Detection model (pandas, numpy, matplotlib).
- Developed a system for aggregating cancer annotations, comparing results, generating follow-ups (python, javascript).

#### NORTHEASTERN NDS2 LAB | RESEARCH ASSISTANT

Jan 2019 - Feb 2020 | Boston, MA

- Implemented Recurrent Neural Networks (RNNs) to classify users of IoT systems using exclusively network traffic.
- Engineered features and implemented unsupervised classification models to detect self-propagating malware.

# **EDUCATION**

## MASTER OF SCIENCE IN DATA SCIENCE NORTHEASTERN UNIVERSITY

May 2021 | Boston, MA

**GPA:** 3.8/4.0 | **Relevant Courses:** Data Science Capstone, Deep Learning, Reinforcement Learning, Supervised Machine Learning, Unsupervised Machine Learning, Statistical Methods in Computing, Data Management, Algorithms

# BACHELOR OF SCIENCE IN COMPUTER SCIENCE, MINOR IN MATH NORTHEASTERN UNIVERSITY

May 2019 | Boston, MA

GPA: 3.73/4.0 | Relevant Courses: Software Development, Linear Algebra, Differential Equations, Probability and Statistics

# **SKILLS**

**Programming**: python, pandas, numpy, pytorch, keras, sklearn, matplotlib, git, github, SQL, linux/unix, bash **Cloud**: Google Cloud Platform, BigQuery, VertexAI, Airflow, Google Cloud Storage, Composer, Docker

# **INTERESTS**

Competitive Chess (1731 USCF), Urbanism, Cooking/Baking, Environmentalism