

Oliver Spohngellert

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WORK EXPERIENCE

MAJOR LEAGUE BASEBALL | MACHINE LEARNING ENGINEER

May 2021 – Present (8 months) | New York, NY

- 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).
- 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.
- Developed end to end system for showing multiple pitches in one video using object detection.
- Lead and organized monthly Data Science research meetings aimed at discussing emerging state of the art techniques.

DEEP HEALTH | MACHINE LEARNING INTERN

May 2020 – Aug 2020 (4 months) | 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 (1 year, 1 month) | 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.

NETRA | DEEP LEARNING/MACHINE LEARNING CO-OP

Jan 2018 – July 2018 (6 months) | Boston, MA

- Optimized download, upload, and labeling sections of data pipeline via multiprocessing to decrease training time for the object detection system from 4 weeks to 2 weeks.
- Trained logo detection model using transfer learning, increasing number of classes by 500.
- Researched NLP approaches for content safety in videos, using FastText and Word2Vec models on video descriptions.

INTUIT | SOFTWARE ENGINEER CO-OP

Jan 2017 – July 2017 (6 months) | San Diego, CA

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:** Large Scale Storage/Retrieval, Software Development, Linear Algebra and Differential Equations, Object Oriented Design, Probability and Statistics

SKILLS

Programming: python, R, pandas, numpy, pytorch, keras, sklearn, matplotlib, tidyverse, git, SQL, linux/unix, GCP

Concepts: Deep Learning, Supervised/Unsupervised Learning, Functional Programming, Software Development, NoSQL

PUBLICATIONS

The House That Knows You: Extracted data from IoT network traffic logs to classify the user of the IoT devices during a given time period, with top overall F1 score of 0.86. <https://arxiv.org/abs/1908.00592>

INTERESTS

Competitive Chess (Peak online rating 2122), Fitness, Data Privacy, Urbanism, Environmentalism