Anna Orosz

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Education

University of Pennsylvania | **Bachelor's** degree in **Mathematics** and **Computer Science** *May 2021*

Relevant Coursework: Machine Learning, NLP, Algorithms & Data Structures, Unix, Python, Computer Architecture, Graph Theory and Algorithms, Abstract & Linear Algebra, Analysis, Game Theory, Calculus, Language and Automata, Economics

Professional Experience

MBition - Mercedes Benz Innovation Lab | **Artificial Intelligence** Intern | Berlin, Germany *June 2020 – present*

- Build time series model detecting & classifying data outages among millions of Mercedes Benz data
- Evaluate state-of-the-art approaches (SARIMAX, LSTM, PROPHET) in Azure Databricks environment with *PySpark*
- Innovate on frontline of automotive world and develop next generation of self-driving Mercedes Benz automobiles

LogMeIn | **Machine Learning** Intern | Budapest, Hungary *January 2018 – July 2019*

- Developed award-winning NLP Hackathon project for training QA systems using state-of-the-art Deep Neural Networks
  - Won 1st prize Tech Innovation + Audience favorite prize + 2nd place Best Business Value Innovation prizes
- Researched term weighting methods, class hierarchy models facilitating email automation for Top 5 Indian Bank
- Enriched Q&A text corpus in languages (VN, GE, IN, etc.) by building sophisticated web-scraping services for Bold360 AI
- Specialized in Applied Research for **Natural Language Processing,** worked in *Python* with *Keras, Tensorflow, scikit-learn*

Facebook | **Software Engineering** Intern | Menlo Park, CA *May 2017 – August 2017*

- Modernized internal client-library tool `Hyperloop` completing bulk data transfers for Facebook's Data Scietists
- Overhauled internal tool `COPTA` for copying directories across *Hadoop Distributed File System* clusters and FB's data centers
- Engineered detailed *Scuba* tables for `Hyperloop` and `COPTA` as (100+ petabytes data)
- Operated with multi-tenancy, network utilization, scheduling, cross-dc connection-pooling in *C++*

RapidMiner | **Software Developer** Intern | Budapest, Hungary *May 2016 – August 2016*

- Used **Data Science** to program operators in Studio designed to process, analyze and alter data locally
- Designed Operators in `Radoop` - in *Spark* scripts - to process data on large scale with Apache Hadoop
- Repaired bugs and designed new features in *Java* while maintaining a stable infrastructure

Projects

Time series model *June 2020 – Present*
Create seasonal and trend-sensitive time series model assessing Mercedes Benz system failures. **[Python]**

Standardized Testing AI *March 2020 – May 2020*
Built DistillRoBERTa model for answering standardized testing Science questions in multiple-choice style. **[Python, TensorFlow]**

Chatbot *November 2018 – March 2019*
Established Question Answering system using BERT to serve Bold360 AI's clients. (3x Hackathon winner) **[Python, TensorFlow]**

Youtube Spam Comments Detector *November 2017*
Classified comments as ham or spam with Naïve Bayes and SVM models by using TF-IDF transformation. **[Python, scikit-Learn]**

County Election Predictor *September 2017*
Developed and compared NN & SVM models predicting 2016 election results by county. **[Python, Keras, scikit-Learn, TensorFlow]**

Image Classification *May 2017*
Fine-tuned NN model trained on the ImageNet dataset to classify images of UPenn/non-UPenn logo. **[Python, TensorFlow]**

Leadership Experience

CIS 530 - NLP class: Incoming *Teacher's Assistant* in graduate-level Natural Language Processing class at Penn in Fall 2020

The Daily Pennsylvanian: *Team Lead Machine Learning Engineer* at the UPenn school newspaper's Analytics department

AΩE Engineering Sorority: *Mentor* to students in a society of women engineers whose sole purpose is girls' advancement in STEM

Tutoring Center @UPenn: *Tutor* to fellow undergraduates for Computer and Information Science & Mathematics classes

Science is a Woman Thing: *Initiator & Organizer* for Hungary's 1st STEM conference for hundreds of high school female students

Proficiencies and Passions

Prog. Languages: Java, Python, SQL, C++, C, OCaml, Bash/Shell, HTML, Assembly Language

Platforms/Modules: scikit-learn, Keras, TensorFlow, PySpark, Linux/Unix, Git/Mercurial, JupyterHub/Lab, Azure Databricks

Languages: German (Fluent), Hungarian (Native Speaker), French (Intermediate)

Interests: Natural Language Processing, Autonomous Vehicles, Machine Learning, AI & Data Science, Cloud services

Activities & Hobbies: driving my Piaggio, horseback-riding, bouldering, salsa-dancing, ice-skating & skiing, cinematography