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EDUCATION

UNIVERSITY OF COPENHAGEN PHD IN NATURAL LANGUAGE PROCESSING AND MACHINE LEARNING

Jul 2021 - Jun 2024

Focusing on knowledge representations, and robustness and reliability of language models. Advised by Anders Søgaard.

- Developed dataset to study consistency in multilingual large pre-trained language models.
- Studied the impact of pragmatic oddness in knowledge prompting for contextualized language models.

UNIVERSITY OF CHILE COMPUTER SCIENCE ENGINEER (ENGINEERING DIPLOMA) Completed Jul 2019

Cum. Grade: 6.5/7.0 (GPA 4)

Years of studies: 6

COURSEWORK

Computational Intelligence
 Data Mining
 Probabilistic Robotics
 Probabilities and Statistics
 Linear Algebra
 Multivariate calculus
 Discrete Mathematics
 Algorithms and Data Structures
 Theory of computation
 Programming design methodologies
 Databases
 Programming Languages
 Operating Systems

SKILLS

PROGRAMMING

Advanced:

Python • Pytorch • C++

Intermediate:

Bash • Tensorflow • SQL • Java

Familiar:

Assembly • R • CSS/HTML

LANGUAGE

Spanish: Native

English: Fluent

French: Excellent command

OTHER HOBBIES

Handball player

Occasional runner

Amateur photographer

EXPERIENCE

GOOGLE | SOFTWARE ENGINEER (YOUTUBE VIDEO CLASSIFICATION)

Oct 2019 - May 2021 | Paris, France

- Part of the team developing Youtube classification platform for training, evaluating and governing classifiers.
- In charge of building and serving 3 different binary classification models for videos.
- Developed multiple evaluation analysis for our classifiers.
- Designed and implemented pipelines for automatic sampling, human labeling, training, and evaluation of classifiers.
- Developed weighted and importance random sampling.

20% GOOGLE BRAIN SUMMARIZATION TEAM

- Defined and presented the state of the art for the data-to-text task.
- Run experiments fine tuning a transformer model in 10 different data-to-text datasets.

FACEBOOK | SOFTWARE ENGINEER INTERN (IG GROWTH RANKING)

Jan 2019 - Mar 2019 | Menlo Park, California

- Added cached behaviour for server failures. Used A/B testing to experiment.
- Implemented counters and throttling for clients of the ranking server.
- Migrated features extraction to a general Facebook features store.
- Designed general framework for features extraction from different sources.

GOOGLE | SOFTWARE ENGINEER INTERN (SEARCH CORE TEAM)

Jan 2018 - Apr 2018 | Mountain View, California

- Worked in anomaly detection on time series using Bayesian DLM.
- Improved the signal by incorporating cycles of different lengths to the model.
- Improved memory usage on the signal calculation.
- Trained and compared Tensorflow models with/without the new signal.

RESEARCH

ENGINEERING THESIS | ICLR 2020 (AI4AH WORKSHOP)

Predicting Unplanned Readmissions with Highly Unstructured Data

- Proposed and developed a deep learning model for predicting inpatient readmission.
- Used 10 years of data from a Chilean clinic that contained mainly free text.
- Obtained results comparable to the state of the art in the task.
- Presented the paper at the AI4AH workshop at ICLR2020 as oral (link).

UNDERGRAD RESEARCH | EMNLP 2017 (ARGUMENT MINING WORKSHOP)

200K+ Crowdsourced Political Arguments for a New Chilean Constitution

- Compared manual text classification to linear and neural network models.
- In charge of the development of the deep neural network (Deep Averaging Network).

OTHER PROJECTS

OPEN SOURCE CONTRIBUTIONS

- Fixed and merged two bugs in the masked component of NumPy (link).

VOLUNTEERING

- Grace Hopper 2020 scholarship reviewer.
- Venkat Panchapakesan Google 2019 scholarship reviewer.

ENCOURAGING WOMEN

- Founded non profit organization: "Niñas PRO".
- Created and taught programming course for women students.
- Organizer of "hour of code" for school students. (3 times in 2016)

AWARDS

2019	Honors	Graduated with the highest academic distinction
2013-2018	Honors	Dean's list
2017	Fellow	Latin-American AI Summer School (EVIC)
2015	11 nd /450	Ascenci Dev Cup (France) Finalist
2012	2 nd /90	High School Graduation position