# **ANDREI STOICA**

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## **WORK EXPERIENCE**

## **Teaching Assistant**

#### **Ontario Tech University**

September 2017 - Present

Oshawa, ON

- Lead classes of 20-25, junior and senior level undergraduate students through lab activities
- Corrected student work and provided one-on-one feedback for improvement
- Courses: Machine Learning, Mobile Devices(Android), Programing Workshop, System Development and Integration, Web Development, Interactive Media, Compilers

### **Graduate Research Assistant**

## **Ontario Tech University**

May 2018 - August 2020

Oshawa, ON

- Lead the research on text mining and natural language processing queries in relational databases
- Topics and Technologies used: PostgreSQL, topic modeling, NLP, Python, web services

# **PROJECT EXPERIENCE**

## NLP Relational Queries And Its Applications - Thesis Project

- Developed LDA extension to PostgreSQL to allow Topic Modeling of text columns inside of SQL
- Created a web front end to visualize the change in topics over time for academic authors and venues
- Published 2020 IEEE International Conference on Information Reuse and Integration for Data Science

Technologies: Python SQL/PostgreSQL Flask HTML CSS D3.js

## **Scalable Analysis of Open Data Graphs**

- Performed analysis of similarities between documents through Canada's Open Data portal
- Provided insight into organization and connectedness of Canada's Open Data
- Scalable and Distributed code base to allow for large dataset and scaling with time
- Published and Presented at 2019 IEEE International Conference on Information Reuse and Integration for Data Science

Technologies: Python SQL/PostgreSQL Apache Spark/PySpark

Matplotlib GCP Storage GCP Dataproc

#### **Canadian Political Twitter Analysis**

- Built tools to track and analyse the conversation surrounding Canadian politics on Twitter
- Tracked key figures and CDNPoli hashtag and predicted standings in 2019 election

Technologies: Python Tensorflow SQL/PostgreSQL

Matplotlib

# **EDUCATION**

BSc (Hons.) - Computer Science
Ontario Tech University

**#** 2018

Oshawa, ON

MSc - Computer Science
Ontario Tech University

Graduating 2022

Oshawa, ON

## **SKILLS**

**Programming** Python Java Clojure C/C++ Scala Kotlin Dart | Flutter Data Science: Numpy Scipy NLTK Gensim Pandas **IPython Notebooks** Database: PostgreSQL MongoDB Web Services: Flask NodeJS Web Frontend: HTML **CSS** ClojureScript JavaScript Reagent React JQuery AI/ML: Tensorflow scikit-learn word2vec fasttext

# **PUBLICATIONS**

## **Conference Proceedings**

- Stoica, A., K. Pu, and H. Davoudi (2020). "NLP Relational Queries and Its Application". In: 2020 IEEE 21st International Conference on Information Reuse and Integration for Data Science (IRI), pp. 395–398. DOI: 10.1109/IRI49571.2020.00064.
- Stoica, A., M. Valdron, and K. Pu (2019).
   "Scalable Analysis of Open Data Graphs".
   In: 2019 IEEE 20th International Conference on Information Reuse and Integration for Data Science (IRI), pp. 334–341. DOI: 10.1109/IRI.2019.00059.

# **HOBBIES**

- Free and open source software enthusiast
- Maintain a home media and storage server for family running the latest Ubuntu LTS
- Build computers for others, source and consult on components required, install and teach them to install themselves