

# ANDREI STOICA

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## WORK EXPERIENCE

### Teaching Assistant

#### Ontario Tech University

September 2017 - May 2020 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: Mobile Devices(Android), Programing Workshop, System Development and Integration, Web Development, Interactive Media, Compilers

### Graduate Research Assistant

#### Ontario Tech University

September 2018 - Present 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 CDNPol 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 2020 Oshawa, ON

## SKILLS

### Programming

Python Java

Clojure C/C++ Kotlin Scala

### 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 Applications". In: 2020 IEEE 21th International Conference on Information Reuse and Integration for Data Science (IRI).
- 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