





LIDIYA MURAKHOVS'KA

✉ lmurakho@edu.uwaterloo.ca  [lidiyam](https://github.com/lidiyam)  [/in/lidiyam](https://in.linkedin.com/in/lidiyam)  [lidiyam.github.io](https://github.com/lidiyam)  +1 519-729-8547

EDUCATION

University of Waterloo

September 2015 - (Expected) May 2020

B.Sc. Computer Science, Co-op. *GPA: 3.59*

EXPERIENCE

Salesforce

May 2018 - Aug 2018

Software Engineering Intern

Palo Alto, CA

- Designed and implemented network traffic **anomaly detection** system for cloud environments.
- Built **real-time** data pipelines to create centralized cross-account logging solution on **AWS**.
- Analyzed terabytes of network telemetry data to generate insights into traffic activity patterns.
- Developed library for dynamic graph visualization of Spark's GraphX objects utilized across teams.

Shopify

Sep 2017 - Dec 2017

Data Engineering Intern

Ottawa, ON

- Developed features for a **dimensional modeling** tool in PySpark.
- Created pipelines to build and refine large datasets for optimized reporting.
- Transitioned internal container build system to using **Docker**, speeding up CI/CD by 50%.
- Parallelized job scheduling processes to decrease deployment times by 20%.

Intersect

Jan 2017 - Apr 2017

Software Engineering Intern

Ottawa, ON

- Implemented core features for **user and entity behavior analytics** application.
- Reduced runtime of all data synchronization jobs by implementing **incremental** indexing mode.
- Refactored back-end of reporting application for optimized **Elasticsearch** indices.

Intersect

May 2016 - Aug 2016

Software Engineering Intern

Ottawa, ON

- Implemented statistical threat detection models in Scala using **Apache Spark** framework.
- Built endpoints for a reporting application in Java, querying data from Elasticsearch.
- Developed scripts to support effective troubleshooting and monitoring of analytics stack.

SKILLS

Languages

Python, Scala, Java, C, C++, R, Racket, SQL, Bash

Technologies

Apache Spark, Hadoop, HBase, Elasticsearch (ELK), Kinesis, Phoenix

DevOps

AWS, Google Cloud Platform, Docker, Terraform, Oozie, Datadog

PROJECTS

Break CAPTCHA | *Python, OpenCV, Keras, Tensorflow, Numpy, Docker*

- Solving simple 4-letter captcha challenges with OpenCV and Keras.

Tweet Analyzer | *Scala, Apache Spark, MLlib, ELK*

- Sentimental analysis of tweets in Scala with Apache Spark and Elasticsearch.

Venmo Transactions Graph

- Analyzing a graph of streaming Venmo payments over a sliding window of time.