

# Konstantinos Kastritis

Email: [dinokastritis@gmail.com](mailto:dinokastritis@gmail.com) Mobile: (905) 960-1970

Github: [github/kkastr](https://github.com/kkastr) LinkedIn: [linkedin/kkastr](https://www.linkedin.com/in/kkastr) Website: <https://kkastr.github.io> Google Scholar: [scholar/kkastr](https://scholar.google.com/citations?user=kkastr)

## SKILLS

---

- Python, C, C++, CUDA, SQL, Typescript, Pytorch, Deep Learning, NLP, Time Series Models
- Git, Linux, React, Docker

## PROJECTS

---

### Reddit Sentiment Analysis - [kkastr/reddit-sentiment/](https://github.com/kkastr/reddit-sentiment/)

- Scraped comments from various subreddits and stored them in a database using Pandas.
- Performed sentiment analysis on the comments with the NLTK library.
- Created visualizations of the data yielding insight on the behavior of reddit users.

### Predicting Stock Prices - [kkastr/stock-price-predictions/](https://github.com/kkastr/stock-price-predictions/)

- Scraped historical ticker data from Yahoo Finance.
- Created a model for the time series of stock prices using LSTM neural networks.
- Generated predictions of future value.

## EXPERIENCE

---

### Ontario Tech University - Research Associate (Part-Time)

September 2021 - June 2022, Remote

- Implemented data pipeline to handle large amounts of simulation data (Python, SQL).
- Performed statistical analysis and designed metrics to provide research insight.
- Created visualizations of data for use in physics conferences (Python).
- Maintained software used for research, ensuring stability (Python, C++, CUDA).

### Ontario Tech University - Graduate Research Assistant

September 2016 - August 2019, Oshawa, ON

- Provided theoretical and data-driven insight to experimental work, yielding two publications (Python).
- Added research specific features and API to GPU capable simulation software (Python, C++, CUDA).
- Enabled the group to transition from serial processing on clusters to GPU computing, which greatly improved productivity.
- Wrote internal documentation, and trained students in using simulation software with the custom API.

### Ontario Tech University - Teaching Assistant

January 2015 - December 2020, Oshawa, ON

- Taught students in undergraduate physics and computer science courses.
- Assisted with increasing the amount of programming included in the physics program.

## EDUCATION

---

### Ontario Tech University

Bachelor of Science, Physics, 2016

Awarded NSERC undergraduate research award.

Honors Thesis: N-Body Simulations of Dark Matter Halos

### Ontario Tech University

Master of Science, Materials Science, August 2019

Thesis: Computational Studies of Semiflexible Polymer Dynamics Under Confinement.