# **Nolan Dey**

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#### **SKILLS**

**Prototyping:** Python, TensorFlow, Keras, PyTorch, SKLearn, MatPlotLib, NumPy, SciPy, multiprocessing **Experimentation:** GCP, AWS, Pandas, Docker, Kafka, Terraform, PostgreSQL, Linux, Git

#### **EDUCATION**

# MASc in Systems Design Engineering – University of Waterloo

Sep. 2019 - Present

Supervisors: Bryan Tripp, Graham Taylor, Alexander Wong

Research Topic: Adapting Neuroscience Methods to Explain Deep Network Function

## BASc in Systems Design Engineering – University of Waterloo

Sep. 2014 - Apr. 2019

GPA 3.7/4.0, Graduated with Distinction

Exchange term at Lund University (Lund, Sweden)

#### **EXPERIENCE**

# Machine Learning Research Intern – Mind Foundry (Oxford, UK)

Jun. 2018 - Aug. 2018

• Worked under Prof. Stephen Roberts to develop a general method to predict the training time and memory usage of machine learning algorithms given a data set and hyperparameters, using SKLearn, MatPlotLib, GCP

# Machine Learning & Web Intern – Apple (Cupertino, USA)

Sep. 2017 - Dec. 2017

- Identified and automated a costly labelling process with image classifier using SKLearn, MATLAB, NumPy
- Created a scheduling application with Ember, Rails, and D3 which improved internal workflows

#### Undergraduate Research – University of Waterloo (Waterloo, Canada)

Jun. 2017 - Aug. 2017

• Under Prof. Jennifer Boger, enabled a woman with advanced multiple sclerosis to initiate and receive calls from a long-term care facility using a custom Android app and a bedside mount

# Data Science Intern – Capital One (Kitchener, Canada)

Jan. 2017 - Apr. 2017

- Developed and deployed a distributed event data pipeline that processed 480 MB/s and saved \$200k/year
- Leveraged Python, Scala, Docker, Terraform, Ansible, AWS, Kafka, Snowplow, and PostgreSQL in pipeline

### Full-Stack Developer Intern – Parabol (Remote)

Sep. 2016 - Dec. 2016

• Remotely contributed to open-source web-app using Node, React, Redux, RethinkDB, GraphQL

# Software Engineering Intern – Connected Lab (Toronto, Canada)

May 2016 - Aug. 2016

• Developed microservices using Node, React, MongoDB, CloudFoundry, and pair programming

# iOS Developer Intern – Kik (Waterloo, Canada)

Sep. 2015 - Dec. 2015

• Wrote major social sharing feature in Objective-C for an app with over 200M users

# Quality Assurance Intern – Kik (Waterloo, Canada)

Jan. 2015 - Apr. 2015

• Rigorously tested new features, conducted usability testing, and worked with developers to find issues