# **ERIC KEILTY**

**↑** Greater Boston Area**♦** 603.970.1800**☑** epkeilty@gmail.com

Curious, passionate, detailed-oriented, and motivated **MASc graduate in Computer Engineering** from the **University of Toronto** with 4 summers of work experience in AI development including an internship with Salesforce, and additional experience in full-stack development. Proven ability to lead teams, manage clients, and consistently deliver high-quality presentations through 2 years of teaching and running a university course. Currently pursuing a career as an AI/ML technical consultant.

### PROFESSIONAL SKILLS

Python / PyTorch / TensorFlow

Javascript / React

• C / C++

AWS / GCP

- Complex Problem Solving
- Public Speaking / Interpersonal
- Data Visualization / Simple Explanations
- Adaptability / Flexibility

### **EDUCATION**

Master of Applied Science - University of Toronto 2021 - 2023

Department: Electrical & Computer Engineering

Supervisor: Andreas Veneris

Bachelor of Applied Science - University of Toronto 2017 - 2021

Major: Engineering Science – Machine Intelligence

CGPA: 3.96

St. Thomas Aguinas High School

GPA: 4.46 (Valedictorian)

### RELEVANT EXPERIENCE

### Full Stack AI/ML Developer - Extropolis

May 2023 - Present

• Utilized large language models (GPT-4, LLaMA, etc) and prompt engineering to create helpful and personalizable assistants.

# **Head Teaching Assistant - University of Toronto**

Sep 2022 - Dec 2022 Sep 2023 - Apr 2023

- Prepared and delivered weekly lectures to classes of over 100 students.
- Each semester, created from scratch 5 homework assignments, a midterm, and final exam.
- Led a team of 3 tutorial TAs and 10 grading TAs, ensuring timely completion of necessary tasks.
- Moderated a message board of over 300 students, responding to 400+ questions each semester.

#### Al/ML Intern Analyst - Salesforce

Sep 2020 - Dec 2020

- Utilized NLP techniques and pre-trained models to analyze internal customer correspondences to improve existing customer support chatbot.
- Led a team of 3 interns, spearheading architecture and method of the solution, achieving results and insights beyond the expectation.

#### **NLP Researcher - University of Toronto**

- Implemented pre-trained BERT and GPT-2 models in both PyTorch and TensorFlow in a chatbot designed to have Motivation-Interviewing style conversations.
- Configured and hosted user testing server on a Google Cloud virtual instance to test chatbot performance using a study with participants from prolific. Received higher quality scored compared to the previous model.

#### Full Stack AI/ML Developer - AskVoco

May 2019 - Jan 2020

- Implemented Text-to-Speech and BERT for automatic categorization of audio content, integrated as an Alexa Skill to provide Alexa users with more personalized content.
- Designed company website connected to a firebase database to host audio content, audio metadata, user accounts, and user metadata. As part of the website, created an RSS parser to get audio content from users.

### Java Backend Developer - DNAStack

May 2018 - Aug 2018

- Received the internship through the 2018 Google Summer of Code program.
- Collaborated with the Global Alliance for Genomics and Health (GA4GH) to create and implement a standardized API for genomics health data. The API was created using the Java Springboot framework, integrated with a MYSQL database, packaged with Maven, and authenticated with Keycloak.

## **Junior Programmer - University of New Hampshire**

Jun 2015 - Aug 2015 Jun 2016 - Aug 2016

- Developed C++ libraries for sonar equipment to model refraction in the sound speed profile, resulting in increased efficiency compared to the previous software.
- Created a graphical interface in Cesium.js for mission planning of autonomous robotic boats.

# **AWARDS & ACHIEVEMENTS**

Best ECE Teaching Assistant Award     Shortlist of TATP TA Teaching Excellence Award	2023
<ul> <li>Award of Excellence – 3.9 CGPA or higher in all semesters of undergrad</li> <li>University of Toronto Scholar</li> </ul>	2021
NSERC Research Grant	2020
<ul><li>1st place in UtraHacks hardware hackaton</li><li>3rd place in semester-long Autonomous Robot design and construction project</li></ul>	2019
<ul> <li>Ranked #1 in the Engineer Science program – highest GPA and course average</li> <li>Fujino/Smith Emergence Scholarship</li> </ul>	2018
<ul> <li>Valedictorian – highest GPA in high school</li> <li>Student Athlete of the Year</li> <li>National AP Scholar Award - score 4 or higher on 8 or more exams</li> </ul>	2017