Intro to Tensorflow.js: Syllabus

January 14, 2020 / 8:00 PM - 9:00 PM EST

Important Links

Workshop Hackpack

Pre-workshop checklist, and resources to explore during and after the workshop.

Hack the North 2020++ Event Schedule

Check this out to stay up-to-date on activities, workshops, and other key happenings this weekend.

Motivator

Most of us are amazed by the applications of machine learning. But machine learning requires a certain amount of experience. But how can we integrate these models easily without needing to have little or no knowledge about machine learning in our web applications. You will learn about that in this workshop on Tensorflow.JS.

Learn how to integrate complex machine learning algorithms to create really interactive and effective web applications. It will be really great for beginners in machine learning or those involved in web development

A web application that can include machine learning capabilities.

Leverage your existing web development skills to create machine learning based web applications.

Create highly intuitive machine learning applications during the hackathon.

Prerequisite Knowledge

In order to get the most out of this workshop you should be comfortable with the following concepts:

- Basic JavaScript Syntax
- Basic CSS/HTML
- OPTIONAL: Basic Machine Learning knowledge

Learning Outcomes

This is what you will walk away from the workshop able to do:

- Learn about Tensorflow.JS
- Learn how to integrate machine learning in Javascript using Tensorflow.JS
- Learn how to easily implement machine learning models in Javascript for your hackathon project

Timeline (1 hour)

| Time | Module | Description |
|---------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 25 min. | Introduction to Tensorflow.JS | High level overview of an introduction to TF.JS |
| 10 min. | Tensorflow.JS CDN and ML5.JS | Building our very own machine learning based image classification web application using Tensorflow.JS |
| 10 min. | Javascript Code for Image Classification | |
| 5 min. | Loading machine learning model and using model predictions | |
| 5 min. | Q&A Closing Remarks | Bye! |