# **Indrajith Indraprastham**

A curious person who likes to learn new things and tinker with computer programs.

#### **SKILLS**

### Web Development

- Experienced in building scalable web applications.
- Experienced in frameworks such as Django, Jinja2 and Bootstrap.
- Worked with Distributed Datasets and Mysql.
- Experienced in data scraping and data ingestion.
- Experienced in using Git, AWS, Google App Engine, Openshift and Heroku for deploying and computing.

## **Data Science and Machine Learning**

- Experienced in analyzing large scale data and using advanced statistical and machine learning models to provide meaningful insights and business intelligence.
- Skilled in building models using machine learning. Worked with time series and sequential data.
- Worked on demand forecasting, inventory level optimization and music information retrieval.
- Experienced in using technologies such as Spark, Tensorflow, pytorch and other frameworks such numpy, pandas, scikit and scipy.

#### **EXPERIENCE**

**Freelance Data Engineer -** Lrnr (Pochys Ventures Inc.)

JAN 2018 - PRESENT

**Data Science Consultant** - Spineor Technologies

JULY 2017 - JAN 2018

**Part-Time Freelance Developer** - *Upwork* 

APRII 2011 - FFB 2014

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#### **LINKS**

Github:

github.com/indrajithi

Blog:

indrajith.me

Portfolio:

indrajith.me/portfolio

Resume:

resume.indrajith.me

#### **LANGUAGES**

Python, C, Matlab, C++

#### **EDUCATION**

# Bachelor's Degree in Computer Science and Engineering — Adichunchanagiri Institute of Technology, Chikmagalur

Aug 2012 - July 2017

#### **PROJECTS**

### **Automatic Data Ingestion**

- Designed the data ingestion pipeline to create 40 courses automatically.
- Scraped data from open resources and dynamic web pages.
- Written transformer to convert HTML to JSON format. Preserved the DOM structure and parsed each html tags and its attributes.
- Mapping and versioning of the resources. Used Mysql database.
- Convert neutral JSON to target HTML using Jinja2 template engine.

### **Question Generation Using NLP**

- Created a web application using Django where users can input a text and the generate questions as output.
- Trained an attention based sequence learning RNN model.
- Used Stanford Question Answering Dataset (SQuAD) and Stanford GloVe word embeddings.

### **Inventory Level Optimization** — *Predictive model building.*

- Demand forecasting for an Ecommerce shop with over 1 Million products.
- Analyzed large inventory datasets. Determined the rate of change and the movement of products in the inventory.
- Build statistical and machine learning models using historical data to forecast demand and optimize inventory levels.

#### **OPEN SOURCE PROJECTS**

# <u>Music Genre Classification App</u> — A Web app to classify music based on genres.

- Used various machine learning classification algorithms to classify a music to six classes: rock, pop, jazz, classical, metal, hip hop.
- Used Logistic regression and Support Vector Machine.
- Made a web app using Python, Django and AngularJS.
- This project was featured on *Github Trending* for Python language.

# <u>Audio Spectrum Visualizer in OpenGL</u> — Real time audio power spectrum using OpenGL.

- Used fast fourier transform to generate the power spectrum of an audio and visualize it in real time using OpenGL.
- This project was featured on *Github Trending* for C language.

### <u>Time-Spark</u>— A python package for time series analysis on Spark.

- Feature to Load data from multiple CSV files in to Spark RDD
- Create a data structure with selected columns for time series analysis.
- Option to Apply filtering algorithm like *Savitzky Golay* for data smoothing.
- Fit a polynomial function of Nth order to the entire data or its subset.
- Find the derivative and rate of increase or decrease of the data points.

## <u>Question generation:</u> — Demonstration of rule based question generation using POS tags.

<u>A tiny web crawler:</u> — A basic web crawler written in python.

<u>Anagram Solver App</u>: — A web app written to solve scrambled words.

<u>Sudoku Solver in C++</u>: — A simple command line Sudoku Solver written in C++