# Indrajith Indraprastham

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

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## 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.

## LINKS

**Github:**
github.com/indrajithi

**Blog**:
indrajith.me

**Portfolio:**
indrajith.me/portfolio

**Resume:**
resume.indrajith.me

## LANGUAGES

Python, C, Matlab, C++

## EXPERIENCE

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

JAN 2018 - July 2018

### Data Science Consultant - *Spineor Technologies*

JULY 2017 - JAN 2018

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

APRIL 2011 - FEB 2014

## EDUCATION

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

Aug 2012 - July 2017

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## 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.

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## OPEN SOURCE PROJECTS

**Music Genre Classification App** — *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.

**Audio Spectrum Visualizer in OpenGL** — *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.

**Time-Spark**— *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.

**Question generation:** — *Demonstration of rule based question generation using POS tags.*

**A tiny web crawler:** — *A basic web crawler written in python.*

**Anagram Solver App**: — *A web app written to solve scrambled words.*

**Sudoku Solver in C++**: — *A simple command line Sudoku Solver written in C++*