

# 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 and REST APIs.
- 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.
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## 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

## LINKS

### Github:

[github.com/indrajithi](https://github.com/indrajithi)

### Blog:

[indrajith.me](http://indrajith.me)

### Portfolio:

[indrajith.me/portfolio](http://indrajith.me/portfolio)

### Resume:

[resume.indrajith.me](http://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

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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++