

# SAGAR PATIL

Senior Software Engineer at Fast Retailing Co. Ltd.  
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## EXPERIENCE

### Fast Retailing Co. Ltd.

Software Engineer (Senior -2)

Tokyo, JP

Jun. 2019 – Present

- Worked in the Enterprise Development team for SCM.
- Built internal functions and screens for Business Users.
- Design and Optimize internal business process for users.

### BizTime IT Solutions Ltd.

Java and Front End Developer Intern

Bangalore, IN

Jun. 2017 – Jul.2017

- Designed the UI and developed the front end of data portal. Validated using Bootstrap and filtered the incoming data using Java.
- Sped up the internal web interface loading time by over 25x after optimizing runtime dependencies.
- Built a web app to visualize results Lead and managed team of ten developers to identify invalid raw logs before analysis.

### AdvoMate

UI and Front End Developer Intern

Mumbai, IN

Jul. 2017 – Sep. 2017

- Designed the UI for prototype of the product. Implemented the front end for MVP using Materialize framework.
- Developed scripts for artificial database generation and testing using PHP and python.
- Built UI for a document making web app using Bootstrap and Materialize.

### AlgoWiki

Core Collaborator and Maintainer

Mumbai, IN

Oct. 2017 – Present

- Open source contributor to the knowledge repository AlgoWiki. Used in a workshop organized at MIT.

### Sardar Patel Institute of Technology

Undergraduate Teaching Assistant, Department of Information Technology

Mumbai, IN

Jul. 2018 – May. 2019

- Designed Lab coursework and post lab assignments for Object Oriented Programming Methodology Course.
- Designed post lab assignments and course assessment quizzes for Design and Analysis of Algorithms Course.

## PROJECTS

### Heart Disease Analysis and Prediction

Aug. 2017 – Oct. 2017

- Designed and Implemented a logistic regression model using Scikit-Learn with 87.3% accuracy for prediction of heart attack.
- Preprocessed features using NumPy, Pandas and Visualized the attribute relationship for patients and non-patients.
- Developed a Web based GUI on medical parameters to provide real time probability of heart attack.

### RHESSI Mission Solar Flare Prediction

Feb. 2018 – Mar. 2018

- Preprocessed features using Pandas and Visualized the pattern in solar flare for last 15 years using Seaborn and Matplotlib.
- Evaluated seven models for energy range prediction. Recommended Gradient Boosting Classifier with 86.78% accuracy.
- Verified the existence of Solar cycle and Sunspot generation through data visualization.

### Open AI Request for Research Language Models

Apr. 2018 – Oct. 2018

- Designed and Implemented a word level language generative model on a joke's dataset using stacked bidirectional GRU in PyTorch.
- Implemented a transformer model using fast weights in Keras and generated jokes with moderate level of humor.

### Hemiplegia Detection using Convolutional Neural Networks

Aug. 2018 – Apr. 2019

- Designed and Implemented simple and deep CNNs using Keras with accuracy of 98.35 % and 77.87 % respectively.
- Preprocessed images & videos and extracted skeleton features of patients using Ffmpeg and Keras.
- Implementing custom PoseNet for real-time detection of hemiplegia.

All projects (15+) are open source and available on GitHub

## ACHIVEMENTS

- **TechGig AI Hackathon 2018** – Secured 1<sup>st</sup> place out of 8514 participants across India. Awarded as Round II Champions. May. 2018
- **SIGPwny Intro CTF 2017** – Secured 10<sup>th</sup> place globally in 12-hour Capture The Flag competition. Jun. 2017

## TECHNICAL SKILLS

**Languages/Technologies:** Python, Java, C, Machine Learning, Deep Learning, Git, SQL.

**Frameworks:** Keras, Spring Boot, Scikit-Learn, NumPy, Pandas, Matplotlib.

## EDUCATION

<i>B.E. Information Technology</i> (Jul. 2015 – Jun.2019)	<i>Intermediate (CBSE)</i> (2015)	<i>Matriculation (CBSE)</i> (2013)
Sardar Patel Institute of Technology	Kendriya Vidyalaya No.2, Belgaum	Kendriya Vidyalaya Umroi, Shillong
CGPI – 8.65/10.00	Score – 91.60%	CGPI – 10.00/10.00