# JOYDEEP BHATTACHARJEE

 $+91 \cdot 8981849869 \diamond$ joydeepubuntu@gmail.com  $\diamond$  Bengaluru Machine Learning  $\diamond$  Deep Learning  $\diamond$  Natural Language Processing

#### TECHNICAL STRENGTHS

Data Science: Machine Learning, Deep Learning,

Natural Language Processing, Statistics, Algebra

Computer Languages and packages: Python, C++, Tensorflow, Pytorch, Numpy, Pandas, Spark, Flash

MySQL, PostgreSQL, Elastic Search, MongoDB

Cloud: AWS, Azure, GCP

#### **EXPERIENCE**

Databases:

## Samsung Semiconductor India Research

Jul 2022 - present

Senior Machine Learning Staff Engineer - python, tensorflow, pytorch, keras, NLP Bengaluru, India

- · Applied Research in the area of Deep Learning and its application in FAB
- · Responsible for improving FAB yield using Deep Learning and AI models.
- · Perform relevant research focused on applying AI in different Samsung products and large scale Manufacturing processes.
- · Publishing work and research in Journals and conferences, create patents for Samsung in AI space.

yellow.ai Jan 2021 - Jul 2022

 $Engineering\ Manager\ (NLP)\ -\ python,\ tensorflow,\ pytorch,\ keras,\ NLP$ 

Bengaluru, India

- · Design and implement next generation AI/NLP infrastructure for building and deploying thousands of models at scale in conversational AI.
- · Responsible for research, development, production, and scaling of full pipeline of message flow and other intelligent NLP systems in multi-lingual and multi-modal contexts.
- · Research, implementation, benchmark existing literature for various purposes.
- · Leading the team which works in parallel and in collaboration to produce custom-made algorithms using machine learning/Deep learning frameworks-libraries like torch/hugging face/TensorFlow.
- · Prepare production-ready code with pre/postprocessing and native scaling in Kubernetes or on-prem environment.
- · Responsible for all MLOps, Cloud infra management for ML-related service.
- · As a lead, I am answerable for client issues (explanation on models prediction and performance), custom requirements, new product feature exploration, POCs, architecture and design discussion, problem solving, hiring, mentorship and other decision making tasks.

#### Nineleaps Technology Solutions

May 2017 - Dec 2020

Technical Lead - Data Science, Spark, Scikit-learn

Bengaluru, India

- · Worked on projects such as Retail Demand Forecasting and Medical Analytics Application
- · Design ML and Optimization architectures for Inventory Forecasting and Optimization system for 40000 products across thousands of stores
- $\cdot$  Deployment and maintenance of highly available forecasting application.
- · Built the model deployment lifecycle from ground up: model versioning, deployment, monitoring and dashboarding.
- · Public health knowledge graph. Built ETL pipelines, data-access and querying layer for graph DB at a scale of 1B+ edges and 200M+ nodes.

Python Developer Bengaluru & Kolkata

- · HackerEarth Category Head Python Nov 2016 May 2017
- · SLK Software Services Private Ltd. Software Engineer Aug 2015 Oct 2016
- · Tata Consultancy Services Systems Engineer Dec 2011 Jul 2015

## **EDUCATION**

## National Institute of Technology, Silchar

July 2011

B.Tech in Electrical Engineering

Overall GPA: 6.98

#### **PUBLICATIONS**

# Practical Machine Learning with Rust

Dec 2019

Book

Explore machine learning in Rust and learn about the intricacies of creating machine learning applications. This book begins by covering the important concepts of machine learning such as supervised, unsupervised, and reinforcement learning, and the basics of Rust. Further, you'll dive into the more specific fields of machine learning, such as computer vision and natural language processing, and look at the Rust libraries that help create applications for those domains. We will also look at how to deploy these applications either on site or over the cloud.

# fastText Quick Start Guide

Jul 2018

Book

Facebook's fastText library handles text representation and classification, used for Natural Language Processing (NLP). Most organizations have to deal with enormous amounts of text data on a daily basis, and gaining efficient data insights requires powerful NLP tools such as fastText. This book is your ideal introduction to fastText.

#### OTHER LINKS

LinkedIn: https://www.linkedin.com/in/joydeep-bhattacharjee-934a1157/

Github: https://github.com/infinite-Joy
HuggingFace: https://huggingface.co/infinitejoy
Twitter: https://twitter.com/alt227Joydeep