

NIDHIN PATTANIYIL

MACHINE LEARNING ENGINEER

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Skills

MACHINE LEARNING

Keras
Pandas
Scikit-learn
Apache Spark
TensorFlow
Pytorch
fastai

DEVOPS

Terraform
Docker
Kubernetes
Ansible

WEB/MOBILE FRAMEWORKS

React
Flask
Expo
React Native

LANGUAGES

Python
TypeScript / JavaScript
SQL
Java

DATABASE

MySQL
Google Big Query
Elasticsearch
Cassandra

Employment

Machine Learning Engineer in Search · Walmart

Hoboken, NJ · Aug. 2019 to Current

Improved Search Precision by 1% by training models on user engagement data
Build platform to scalably run model inference ; reducing cost by 40%; Onboarded 7+ machine learning models
Evangelized adoption of Google Cloud Technologies

Machine Learning Engineer · Ableto

New York, NY · Nov. 2017 to Aug. 2019

Data
- Built Machine Learning Models to identify patients who are silent sufferers (Logistic Regression, Decision Tree)
- Spearheaded migrating ETL pipelines from Luigi to Airflow / Spark
- Trained Medical Word Embeddings to understand medical lingua (gensim, word2vec)
- Founded company's data science lunch and learn sessions

Backend

- Migrated infrastructure to Docker and Kubernetes
- Modernized our Continuous Integration
- Contributed to the migration of monolith services to event driven architecture

Software Engineer, Machine Learning · GONG

New York, NY · Jan. 2016 to Oct. 2017

Data Engineering
- Built analytics and reporting infrastructure (Mixpanel, Google analytics, PubSub, BigQuery, Airflow)
- Developed AB Testing frameworks for web (Goole Optimize) and email

Machine Learning

- Built a notification systems that identified trending stories
- Built Machine Learning models to cluster News Articles , dedupe stories and recommend stories (Doc2Vec, DbScan, tf-idf)

Backend

- Migrated infrastructure from AWS to Google Cloud (saving 80% monthly expenses)
- Standardized deployment of services using Google Container Engine (Kubernetes) and Docker
- Build micro-services in Python Flask and Scala Play Framework

Frontend

- Build the first version of company's web app in Angular 1
- Migrated company's site from Angular 1 to React improving SEO and loading time
- Contributed to the development of mobile app (React Native)

Data Scientist · Metis

New York, NY · June 2015 to Oct. 2015

12 week program that focuses on enhancing skills used in the data science industry.

- Project I : Examined NY public data sets to determine which places would be the best for street volunteers to deliver flyers to promote their cause.
- Project II: Used linear regression to predict a movie's opening revenue based on the movies metadata and their Wikipedia page activity.
- Project III: Classified images using neural nets, k-means
- Project IV: Summarized tech forum superuser.com forum using NLP and topic modelling

Software Developer · Comcast

Philadelphia, PA · July 2014 to June 2015

- Contributed to building a framework that would allow QA to write BDD scripts that would automate manual testing (Cucumber / Java)
- Build dashboards to monitor nightly run jobs and testing efforts (Flask, Angular)
- Built a proxy framework that aided QA's efforts in reproducing customer bugs (Netty)

Student Researcher · RIT Document Pattern Recognition Lab

Rochester, NY · Jan. 2014 to May 2014

- Architected a search engine for math research papers from the Wikipedia and arXiv collection; system based on TF-IDF for text scoring and custom Symbol Layout tree for math scoring
- Entered our designed system in the NTCIR-11 international conference; system placed in the top 3

Education

Rochester Institute of Technology
BS/MS Computer Science 2014

Natural Language Processing (Udacity)

Computer Vision Nanodegree (Udacity)

Publications

Manning LiveProject: Deploying a Deep Learning Model on Web and Mobile Applications

Worked with Manning Publications to create a hands on course on building machine learning models for Mobile

Combining TF-IDF Text Retrieval with an Inverted Index over Symbol Pairs in Math Expressions

Build a distributed search engine for math research papers.

Proc. 11th NII Testbeds and Community for Information access Research (NTCIR), Tokyo, Japan

Volunteering

Udacity · NLP and Deep Learning Mentor - Alumni Volunteer

Mar. 2019 to Dec. 2019

Collaborate with peer mentors to assist students with Udacity projects and deepen their understanding of NLP and deep learning .
Review student projects, giving valuable feedback for them to meet specifications.

Data Science Hackathon host

June 2016 to Nov. 2016

Worked with team at Correlation One to host a data hackathon for students at NYU

Researched datasets and prepared challenges

Mentored participants with technical issues