

AYUSH GARG

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EXPERIENCE

Data Scientist, HP Inc (R&D)

📅 Sep 2018 – Jul 2021

📍 Bangalore, India

MLOps

📅 March 2021– July 2021

- Created a framework to standardize architecture of ML projects to reuse code, data and models across multiple teams
- Different inputs and models across different hardware could be stitched together into a pipeline & used for pre-processing, training, validation
- Provided interfaces for the modules and abstracted out the event and artifact logging
- Resulted in cohesive projects that can borrow from each other while increasing maintainability

Predifix

📅 Oct 2018 – July 2021

🔧 PyTorch, pandas, numpy

- Tool to guide Customer Support agents for faster resolution of printer/PC related issues
- Used Long Short Term Memory (LSTM) based Deep Neural Network (DNN) to train a model on 200K tickets
- Helped reduce Average Handling Time by approx 27%

Software Engineer, Centurylink

📅 Aug 2015 – Sep 2018

📍 Bangalore, India

DeepAssist

📅 Aug 2017 – Aug 2018

🔧 Tensorflow, Numpy, Flask, NLTK, MySQL, AngularJS

- Recommendation engine to increase the efficiency of Ticketing system (*Ticket=issue raised by end user*) by suggesting steps for ticket resolution
- Used Attention based LSTMs to determine ticket context and recommend the most appropriate steps by training on historical tickets
- Model reached an accuracy of about 83%

PROJECTS

Vespid - Serverless platform to host Vertines

📅 Oct 2021-Present

📍 Illinois Tech

- Vertines - new abstraction to allow individual functions to run in lightweight, virtual environment
- Created a platform, Vespid, that manages the lifecycle of virtines and provides CLI and GUI to interact with the serverless functions
- Vespid is 30 times faster than OpenWhisk standalone tool

Hate-Speech Detection Using Weak Social Supervision

📅 Dec 2020

📍 Illinois Tech

- Text based classification engine to identify hate-speech for social media networks using Weak Social Supervision
- Weak features (likes, comments) generated for unlabeled data supervise the classification of labelled data
- Trained a BertClassification model on Twitter Hate Speech dataset
- With supervision, the f1 score increased by 8%

EDUCATION

Master's in Computer Science

Illinois Institute of Technology, Chicago, US

📅 Spring 2022

📊 4.0/4.0

- Courses Taken: Adv Database Adv OS Cloud Computing Serverless Computing S/W Architecture Adv Algo
- TA for OS
- TA for Online Social Network Analysis

B.Tech in Electronics & Comm Engg

Delhi Technological University, Delhi, India

📅 Spring 2015

📊 3.5/4.0

- Organized Student Interest Groups & IEEE Students' Branch activities and taught at workshops
- Organizing Member in DTU Tech Fest

SKILLS

Python Pytorch Tensorflow 1.0
Pandas Jupyter JIRA Git MySQL
MongoDB Serverless Computing
Data Structures Parallel File System
Distributed File System System Design

ACHIEVEMENTS

- 📄 **Patent-pending**
Machine Learning Based Determination of Troubleshooting Routes Dependent on Product Feature- PCT/US2020/018268
- 📄 **Paper Presentation**
"Learning optimal navigation algorithms from customer support case notes" in DSKD (Data Science Conference, HP)-2019
- 📄 **Paper Presentation**
"Extracting resolution steps from the unstructured logs" in DSKD (Data Science Conference, HP)-2019
- 🏆 **AngelHack**
Won Hypertrack challenge at AngelHack Bangalore Hackathon 2018
<https://www.hackathon.io/trek-o-hun1>

HOBBIES

