

# AYUSH GARG

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## EXPERIENCE

### Data Scientist

#### HP Inc (R&D)

📅 Sep 2018 – Jul 2021    📍 Bangalore, India

- Responsible for researching and implementing Machine Learning models to enable Artificial Intelligence in Customer Support Agent tools

### Software Engineer

#### Centurylink

📅 Aug 2015 – Sep 2018    📍 Bangalore, India

- Responsible to research into POC's for new software projects.

## PROJECTS

### Predifix, HP

📅 Sep 2018 – Present

🔧 PyTorch, pandas, numpy, sql, Django

- Tool for Customer Support Service agents to help them resolve printer/PC related issues easily and hence reduce the average handling time.
- Used Deep Learning model (LSTMs) accounting for printer, issue information as context and customer response to find the course of steps.

### MLOps, HP

📅 Sep 2019 – Present

🔧 Python

- Provided an abstraction for ML projects to modularize various components that can be run on different hardware. Also provided logging of events and artifacts for future usage.

### Automatic Content Generation, HP

📅 Sep 2019 – Present

🔧 PyTorch, pandas, numpy, Flask, BERT tokenization

- PoC to eliminate human error in decoding the AV description(jargon used by HP Sales team) into product information (customer friendly information).
- Used attention based Seq2seq model to encode the AV Description and decode it to the actual product description.

### DeepAssist, Centurylink

📅 Aug 2017 – Aug 2018

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

- Built a tool to make **Ticketing System** intelligent; suggest steps for ticket resolution using Neural Network based models by training on historical tickets.
- Used RNN to get the ticket context, then find the similar tickets. Model reached an accuracy of about 83%.

## LIFE PHILOSOPHY

*"Life is a DIY project"*

## EDUCATION

### MS in Computer Science

#### Illinois Institute of Technology

📅 2022    📊 4.0

### B.Tech in Electronics & Comm Engg

#### Delhi Technological University

📅 2015    📊 3.5

- Organized Student Interest Groups and IEEE Students' Branch activities and taught at workshops

## UNDERGRAD THESIS

### Turbo Encoder-Decoder Simulation

Proved by simulation using C language that with the increasing number of iterations the Bit Error Rate of a Turbo Encoder- Decoder system decreases and nearly reaches the Shannon limit under Additive White Gaussian Noise.

## SKILLS

Python    Pytorch    Tensorflow    Numpy  
Pandas    Flask    Jupyter  
System Design    Prototyping    JIRA    Git  
AWS    Azure    MySQL    MongoDB

## ACHIEVEMENTS

📄 **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

🌀 **Software**  
Created & maintaining a local inventory management and billing system with Amazon & Flipkart Seller API integration

🏆 **AngelHack**  
Won Hypertrack challenge at AngelHack Bangalore Hackathon 2018  
<https://www.hackathon.io/trek-o-hun1>