# Abhishek Nilesh Shah

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## Experience

**IBM Watson** New York, New York **Software Engineer** Iun '17 – Present

• Implemented microservices in "Show Recommendations" feature hosted as a part of Watson Assistant hosted on IBM Cloud to enable users to bootstrap conversational agents by searching chat logs.

- Implemented tools to support content management and curation across 6 languages and 4 industrial domains hosted as part of Content Catalog in Watson Assistant.
- Implemented integration of contextualized embeddings into AMR Parsing for enhancing the Stack LSTMs.

**IBM Watson** Austin, Texas

## **Software Engineer Intern**

Jun 16 - Aug 16

- Implemented a system for analyzing risks by comparing performance of two relation extraction systems of Watson and proposed two new hybrid models for the delivery team.
- Designed backend application for Enhanced Information Retrieval Engine for Watson Practitioner Assistant using Bluemix services.

## Hewlett-Packard (HP)

Bangalore, India

## Research and Development Engineer

Aug 14 – Jun 15

- Implemented a proof of concept for task of developing independent test framework for firmware code of printers using C# and CIL, scaling it to a mechanism that enabled to perform more than 1000 unit tests.
- Managed SNMP services of the System Framework of large scale enterprise Laserjet HP Printers.

# Information Retrieval Lab, DA-IICT

Gandhinagar, India

Research Assistant

May '13 - May '14

- Designed, implemented and analyzed Temporal Information Retrieval Engine and Temporal Intent Classification system for NTCIR Workshop. (The classification system showed 2nd best results.)
- Implemented test framework for data extraction to analyze language understanding of non-native user(thesis).

## CheckDeck **Software Engineer Intern**

Gandhinagar, India

May '12 – Jun '12

- Designed and implemented search module of News Retrieval System as a part of the contribution in initial phase of the startup using Apache Solr Framework tested on 200-300 queries.
- Implemented clustering module of news that was shown as categories of news in the initial version of application.

## **Education**

*New York University (NYU), Courant Institute of Mathematical Sciences* New York, New York M.S., Computer Science (3.89/4.0)Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT)

Sep '15 - May '17 Gandhinagar, India

**B.Tech., Information and Communication Technology** (8.08/10.0)

2010-2014

#### **Publications**

- Tahira Naseem, Abhishek Shah et. al.: Transition-Based AMR Parsing with BERT, Attention and Reinforcement Learning, Paper accepted at ACL 2019 (Print coming soon)
- Neil Mallinar, Abhishek Shah et. al.: Bootstrapping Conversational Agents With Weak Supervision, Paper accepted at IAAI hosted with AAAI, 2019 (Co-presented at AAAI, Hawaii, US, 2019) [pdf]
- Abhishek Shah, Dharak Shah, Prasenjit Majumder: Andd7 @ NTCIR-11 Temporal Information Access Task, NTCIR, Japan, 2014 [pdf]

## **Patents**

- T.K. Ho, Abhishek Shah et. al.: Intent Authoring Using Weak Supervision and Co-Training for Automated Response Systems [P201807796] (Filed 2018)
- Abhishek Shah, Tin Kam Ho: A Method for Creating Compact Example Sets for Intent Classification [P201807725]
- Abhishek Shah, Tin Kam Ho: Class balancing methods for Intent Authoring using Search [P201807796] (Filed 2018)

#### Skills

**Programming Languages:** Python, C++, Java, C#, , C, Scala, Javascript, Groovy

Frameworks and Libraries: PyTorch, DyNet, Spacy, ElasticSearch, Apache Kafka, MongoDB, Protobuf, Snorkel, Pandas, Scikit-Learn, Mono-Cecil, IBM Deep Learning as a Service, IBM Cloud Object Storage, IBM Cloud Functions, Kubernetes, ScyllaDB, PostgreSQL

Tools and IDEs: Vim, Tmux, PyCharm, Git, IntelliJ, Visual Studio, Jenkins