# Abhishek Nilesh Shah

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## Experience

## IBM Watson

New York, New York

### Senior AI Software Engineer

Jun '17 – Present

- Designed and built human agent integration(LivePerson) with Watson Assistant which is hosted as a Beta Feature on Watson Assistant Platform.
- Implemented microservices for "Show Recommendations" feature hosted as a part of Watson Assistant hosted on IBM Cloud to enable premium and plus plan 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.
- Enhanced score of a semantic(AMR) parsing task using that beat previous state of the art system(print below).

# IBM Watson Software Engineer Intern

Austin, Texas

- **Software Engineer Intern** Implemented a system for analyzing risks by comparing performance of two relation extraction systems of Watson and
- Designed backend application with enhanced retrieval capability that helps solution architects and cloud practitioners to search important documents.

#### 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

proposed two new hybrid models for the delivery team.

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* **M.S., Computer Science** (3.89/4.0)

New York, New York

Sep '15 – May '17

Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT)

Gandhinagar, India

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

Aug '10– May '14

#### **Publications**

- Neil Mallinar, **Abhishek Shah**, TK Ho et. al.: Iterative Data Programming for Expanding Text Classification Corpora, Paper accepted at IAAI hosted with AAAI, 2020 (Co-presented at AAAI, New York, NY, US, 2020)
- Tahira Naseem, **Abhishek Shah** et. al.: Rewarding Smatch: Transition-Based AMR Parsing with Reinforcement Learning, Paper accepted at ACL 2019 [pdf]
- 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]

#### **Skills**

**Programming Languages:** Python, C++, Java, C#, C, Scala, Javascript( using Typescript), Groovy

**Frameworks and Libraries:** PyTorch, DyNet, Spacy, ElasticSearch, Apache Kafka, Node.js, MongoDB, Protobuf, Snorkel, Pandas, Sklearn, IBM (Deep Learning as a Service, Cloud Object Storage, Cloud Functions), Kubernetes, ScyllaDB, PostgreSOL

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

Awards: Received IBM Patent File and Plateau award (Given for filing 4 or more patents.)