Abhishek Nilesh Shah

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Experience

IBM Watson   New York, New York
Advisory AI Software Engineer - Watson Assistant Core Algorithms   *Jun '17 – Present*
- Developed spellcheck service in English and French in Watson Assistant to auto-correct incoming user sentences.
- Improve and maintain the microservices for Natural Language Understanding in Watson Assistant hosted on IBM Cloud platform supporting Intent Detection and Entity Extraction that work across 13 languages.
- Researched and implemented microservices for Show Recommendations feature hosted as a part of Watson Assistant to enable users in quick bootstrapping of conversational agents by searching chat logs.
- Enriched semantic(AMR) parser that beat then state of the art system(3rd paper in Publications section).
- Implemented tools to support content management and curation across 6 languages and 4 industrial domains hosted as part of Content Catalog in Watson Assistant.
- Designed and developed parts of service desk and channel-based integrations backend in Watson Assistant.

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 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**   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 and print is attached below)
- Implemented test framework for data extraction to analyze language understanding of non-native user.

CheckDeck   Gandhinagar, India
Software Engineer Intern   *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 articles 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)   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

- Lin Pan, Chungwei-Hang, Haode Qi, **Abhishek Shah** et. al.: Multilingual BERT Post Pretraining Alignment [pdf]
- Neil Mallinar, **Abhishek Shah**, TK Ho et. al. : Iterative Data Programming for Expanding Text Classification Corpora, Emerging Application Track at AAAI, 2020 (Co-presented at AAAI, New York, NY, US, 2020) [pdf]
- Tahira Naseem, **Abhishek Shah** et. al.: Rewarding Smatch: Transition-Based AMR Parsing with Reinforcement Learning, Paper accepted at ACL, Florence, 2019 [pdf]
- Neil Mallinar, **Abhishek Shah** et. al.: Bootstrapping Conversational Agents With Weak Supervision, Emerging Application Track at 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, Java, C++, C#, C, Scala, Javascript(using Typescript), Groovy
Frameworks and Libraries: PyTorch, DyNet, Spacy, ElasticSearch, Apache Kafka, Node.js, Protobuf, Pandas, Sklearn, IBM (Deep Learning as a Service, Cloud Object Storage, Cloud Functions), Kubernetes, Docker, PostgreSQL, Snorkel
Tools and IDEs: Vim, Tmux, PyCharm, Git, IntelliJ, Visual Studio, Jenkins
Awards: Received IBM Patent Issuance Award and Plateau award (Given for filing 4 or more patents.)