

# Ashish Baghudana

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## EDUCATION

### VIRGINIA TECH

M.S. IN COMPUTER SCIENCE

May 2019 | Blacksburg, VA

GPA: 4.00 / 4.00

### BITS-PILANI

B.E. IN COMPUTER SCIENCE

B.Sc. + M.Sc. IN BIOLOGICAL SCIENCES

Jun 2016 | Goa, India

GPA: 8.98 / 10.00

## COURSEWORK

Statistical Machine Learning

Search Engines and Text Mining

Advanced Parallel Computation

Data Mining (UG)

Artificial Intelligence (UG)

Software Engineering (UG)

## TEACHING ASSISTANT

Computer Systems

Microprocessors and Interfacing

## SKILLS

### LANGUAGES

Python • Java • JavaScript • Bash

### TECHNOLOGIES

GCP & AWS • Docker • Consul

Terraform • Apache Mesos • Apache

Aurora • MongoDB • PyTorch

## SCHOLARSHIPS

2017	U.S.A.	Virginia Tech M.S. Tuition Waiver
2014	India	IAS Fellowship
2011	India	INSPIRE Scholarship
2011	India	CBSE top 0.1% certificate

## INTERESTS

Volunteer at TEDxTUM 2016

Curator at TEDxBITSGoa 2014

Electronic Keyboard - 5th Grade,

Trinity College of Music

## WORK EXPERIENCE

### FACEBOOK | SOFTWARE ENGINEERING INTERN - NLP/DIALOG

May 2018 – Aug 2018 | Menlo Park, CA

**Key Technologies:** PyTorch, Hacklang (PHP), React

- Developed a neural coreference resolution system to link different noun phrases using PyTorch
- Improved F1-score by 16% over the existing rule-based system

### PAYPAL | SOFTWARE DEVELOPER - PAAS

July 2016 – July 2017 | Chennai, India

**Key Technologies:** Apache Mesos & Aurora, Docker, Java, Consul, Terraform

- Developed a cloud orchestration platform to provision Apache Mesos clusters across GCP, OpenStack and AWS using Java, Angular and MongoDB
- Designed and implemented a Chaos Monkey framework to test resiliency of the infrastructure by proactively introducing failures
- Improved resource efficiency of infrastructure and brought down provisioning times from 3 hours to <20 minutes

### PAYPAL | SOFTWARE DEVELOPMENT INTERN - PAAS

Jan 2016 – Jun 2016 | Chennai, India

**Key Technologies:** Docker, Python, Tornado, MySQL, Redis

- Developed and deployed a ReST service to promote PayPal microservices from QA to Production
- Demonstrated a proof-of-concept to run multiple microservices on the same VM by dockerizing them

## RESEARCH AND COURSE PROJECTS

### MEDICAL QUESTION ANSWERING | VIRGINIA TECH

Implemented a question-answering system on medical articles collected from Medline and Patient.info using DrQA. Modified the retrieval system from TF-IDF to Doc2Vec for improved accuracy.

### INFORMATION RETRIEVAL | VIRGINIA TECH

Developed a state-of-the-art information retrieval and text analysis using PySpark, HBase, and Solr in support of the GETAR project. Led a team that worked on topic analysis and clustering of tweets and webpages about Solar Eclipse 2017 and Hurricane Irma.

### BIO-NLP | TECHNICAL UNIVERSITY MUNICH

Created nalaf, a BioNLP library that performs named entity recognition and relationship extraction using conditional random fields and support vector machines respectively.

## PERSONAL PROJECTS

### QUESTION CLASSIFICATION

Classifying questions as What, When, Who and Yes/No questions using a Deep Neural Network

### TOPIC MODELLING

Topic Modelling using Infinity-Grams to detect different kinds of topics in the Wikipedia data