Abhijit Bonik

Project Software Engineer @ Spoken Tutorial, IIT Bombay

Profile Summary

I am currently working as a Project Software Engineer at Spoken Tutorial, IIT Bombay. Being a programmer I focus primarily on developing, optimizing and integrating different complex modules, solve various issues and code. Prior to this role I have worked as Senior Project Technical Assistant at IIT Bombay. Previously, I have worked as Web Research Executive at Mirania's Data System. I am a batch topper in Master of Computer Applications from Cotton University. My field of interest are Distributed and Scalable Micro-Service Architectures, Big Data and Machine Learning.

Experience

Aug, 2019 - Project Software Engineer, Spoken Tutorial, IIT Bombay.

Present I am working with the dev team of Spoken Tutorial, developing multiple modules that include Event Logs and Analytics System, Remote Authentication using SAML and OAuth, writing Django custom middlewares, Database Routers, Signals, Rest APIs, Optimizing ORM queries, writing asynchronous cron jobs for converting bulk Spoken Tutorial videos, upgrading the entire system to latest version of Python and Django.

- Aug, 2017 Senior Project Technical Assistant, Fundamental Research Labs, IIT Bombay.
 - Jul, 2019 I was involve in creating core modules for multiple Python and Django projects, design and development of Rest APIs using Django Rest Framework and integrated other Opensource Software APIs in systems. I managed Git branches, created Docker and Docker Compose files for the system. I integrated Elastic Search for indexing events logs. I have supervised interns in different projects and sub-projects.
- Jan, 2017 Intern Developer, NVLI Project, IIT Bombay.
- Jun, 2017 Created a Workflow and Revision module using Python. I worked in integration of Solr search with a Portal developed in Drupal for generating search results and writing specification for multiple modules.
- Nov, 2013 Web Research Executive, Mirania's Data System.
- Apr, 2016 I have handled multiple projects related to technology news aggregation, financial markets, market research. I was involve with resolving client issues and queries from time to time. I have also manage website content in multiple projects for various clients.

Education

- 2014–2017 **MCA**, *Computer Science*, Cotton University, Guwahati. 8.79 CGPA, A Grade, Topper
- 2010–2013 **BCA**, *Computer Science*, IGNOU, Guwahati. 67.25 Percent

2007–2009 Higher Secondary Examination, Science, North Lakhimpur College.

54.2 Percent

2007 HSLC Examination, St. Mary's School, Lakhimpur, .

70.5 Percent

Certification

Jun 2020 **DL0110EN: Deep Learning with Python and PyTorch**, *IBM*, EdX.

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Technical Knowledge Area

Languages Python, C.

Frameworks Django, Django Rest Framework, Flask, ReactJs

Database MySQL, Elasticsearch, Redis, Memcached

Others Numpy, Pandas, Pytorch, Git, Docker, OpenEdx, Microservices.

Major Projects

Spoken Tutorial System.

Worked on SSO OKTA service integration using Django custom middleware. Asyncronous cron jobs. Worked on an Analytics system for visualizing event logs. Caching compute intensive queries using Memcached. Worked on Django Multiple database routers, Django Signals, Creating Rest APIs.

Collaboration System, A project of National Virtual Library of India.

Created a community system in Django. Developed workflow, permissions, forums, comments, notifications for all communities. Developed and implemented required Rest APIs for the system using Django Rest Framework.

Event Logging System.

Developed a Django Middleware module that will capture various request events and log it. The module has Kafka producer functions that sends the log data to Kafka topics. The consumer function later sends the data to ELK stack.

Spoken Tutorial Script Creation Platform.

Using Django Rest Framework created a API based script creation platform that allows spoken tutorial creators to create scripts for their educational videos. Angular Js is used as frontend.

Rendering Scilab Xcox Simulation Output in Latex or Web.

Developed a Python based command line driven software that will take Scilab Xcos file as input and generate a Web or Latex based output. Used Factory Patterns for reading blocks.

Others

Created and deployed n-layer load balancing architecture in N nos. of Vms for Django projects using HAproxy, Nginx, Memcache, MySql. Create a Real-time Collaborative editing module using Django and integrated Etherpad APIs. Created multiple task queue using Celery, Redis and Python for executing large task asynchronously.

Declaration

I hereby declare that all the above-mentioned facts and information are true to the best of my knowledge. I shall be solely responsible for any discrepancy found in them.

Abhijit Bonik