

Akash Tyagi

SOFTWARE DEVELOPMENT ENGINEER II · BACKEND DEVELOPER

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Work Experience

QA Infotech

Noida, India

SOFTWARE DEVELOPMENT ENGINEER II

Jun. 2018 - Present (2.5+ Year)

- Developed the backend functionality to prescribe auto-prescription form leveraging Java, Python and Jython for a major US Healthcare retailer.
- Devised a **computer vision based software product** using Machine Learning and textual data processing for testing websites for accessibility for visually impaired people.
- **Led development** of 2 major projects in Education and Accessibility domain.
- Successfully **converted outsourcing project** to in-house by devising algorithm and presented successful prototype under 30 days.
- Worked closely with COO and VP of organization for developing and delivering product.
- Established ML department in organisation within 1st year and expanded to 4 developers at present.

Skills

Programming Python, Java, Jython, SQL
Frameworks Django, Flask, Spring, SpringBoot
Technologies Machine Learning, Hadoop, NLP, Jenkins, Github, Linux

Key Projects

Tack MF - Mutual Fund Virtual Investment Portal

www.tackmf.in

PYTHON, DJANGO, MYSQL, NGINX, EC2

- A Django based virtual Investment portal to track investments across multiple Fund House and multiple schemes.
- Devised **database schema** to keep track of various investment across multiple user and multiple fund schemes.
- Developed algorithm to calculate real time investment value.
- Deployed application on server and setup reverse proxy on Amazon EC2.
- Wrote **JavaScript scripts** to support various on click and on page load events.

AI-Testbanks

www.aitestbanks.com

NLP, PYTHON, BASH, FLASK, AWS, MONGODB, JENKINS

- Developed a NLP based product that generates questions in 5+ categories from ebooks automatically.
- **Decreased algorithm run time by 80%** for finding relevant distractor set with improvised indexing and pattern matching.
- Established product backend with complete codeflow architecture along with integration with MongoDB, AWS and Jenkins.
- Increased **50% more metadata coverage** and text mapping with revamped ebook parser and mapping algorithms.

ALTEYE

OPENCV, NLP, PYTHON, FLASK, CHROME EXTENSION

- Developed a utility tool that scans website for Images and matches its alt-text and vicinity text for Image relevancy.
- Increased product relevancy by using word embedding and Image captioning.
- Developed a Chrome Extension leveraging product API for plug and play functionality.

Education

AKTU University (Abdul Kalam Technical University)

Uttar Pradesh, India

B.TECH IN COMPUTER SCIENCE AND ENGINEERING

June. 2014 - June. 2018

Open Source Contributions

Hencoder

[pip install Hencoder](#)

PYTHON, DATA STRUCTURE, HUFFMAN CODING

- Published a python package to encode decode any textual data into a secret encoding leveraging Huffman encoding.
- Added an extra security feature by introducing a "secret key" feature that decodes document only with required key.