

# Akash Tyagi

SOFTWARE DEVELOPMENT ENGINEER II · BACKEND DEVELOPER

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## Work Experience

### AllScripts

Remote, India

BACKEND DEVELOPEMNT ENGINEER (CONTRACT)

April. 2020 - Present

- Working on QA Infotech Payroll as Backend Developer for AllScripts.
- Developed the backend functionality to build a **stateless auto-prescription** form service leveraging Java, Python and Jython.
- Responsible for building and maintaining **Rest-Framework based micro service**, developing API serializer and validation checks.
- Developed analytical portal to summarize 5000+ prescriptions data based on database queries.
- **Tech Stack:** Python, Django, Java, Jython

### QA Infotech

Noida, India

SOFTWARE DEVELOPMENT ENGINEER II

Jun. 2018 - Present\* **(2.6+ Year)**

- 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.
- **Tech Stack:** Python, Java, SpringBoot, Spring JPA, Django, NLP, Machine Learning, Selenium

## Skills

**Programming** Python, Java, Jython, SQL, C++

**Frameworks** Django, Flask, SpringBoot

**Technologies** Machine Learning, Hadoop, NLP, Redis, RabbitMQ, Jenkins, Github, Linux

## Key Projects

### Track MF - Mutual Fund Virtual Investment Portal

[trackmf.in](http://trackmf.in)

PYTHON, DJANGO, MYSQL, NGINX, REDIS, CELERY

- A Django based virtual Investment portal to track mutual fund investments across multiple Fund House and multiple schemes.
- Devised **real-time module** to keep track of recurring SIP using asynchronous workers using Celery.
- Developed alert-systems to monitor investments and trigger mail alerts for goals.
- Setup multiple API validation and authorization checks and auto mail trigger system.
- Developed robust UnitTests to check for security checks and validations.

### AI-Testbanks

[aitestbanks.com](http://aitestbanks.com)

NLP, OPENCV, PYTHON, 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.
- Devised rule based algorithms to decipher text and generate precise question localised to chapter context and vocabulary
- 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)

B.TECH IN COMPUTER SCIENCE AND ENGINEERING

Uttar Pradesh, India

June. 2014 - June. 2018