

AJAY PRAKASH

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PROFESSIONAL EXPERIENCE

Cactus Communications

Mumbai, India

Software Engineer

May 2022 – Present

- Achieved a **98% reduction** in API response time by transitioning from threading to asyncio to optimize asynchronous processing and enhancing backend storage efficiency through the migration from S3 to AWS EFS.
- Developed and maintained Titan, an extraction tool for PDF, DOCX, and LaTeX files, serving as the backbone of Paperpal and supporting over **one million** users.
- Reduced response time by 50% by shifting monolithic docxto-pdf service to microservice architecture.
- Developed five new generative AI features for Paperpal Copilot, leading to a **475% YOY revenue** growth.
- Created a frontend web application for showing integrity checks on pdf research papers using reactJS and vite.
- Migrated CloudWatch dashboards to Grafana, enhancing monitoring capabilities and providing more flexible visualization options.
- Identified and repaired critical bugs, resulting in a **50% decrease** in system errors and improved user satisfaction.
- Achieved **100% system availability** by developing a timeout management solution by integrating AWS SQS as a Dead Letter Queue with AWS Lambda.
- Developed an API enhancing user engagement through personalized article recommendations derived from feed history data using FastAPI, AWS ECS with EC2, and Terraform.
- Implemented an API for document classification based on textual content analysis using FastAPI, AWS ECS with Fargate and Terraform.

Wellowise

Delhi, India

Full Stack Developer

Oct 2019 – Jan 2022

- Reduced report generation timeline from **1 week to 3 hours** through the successful implementation of an automated process that retrieves data from the backend, renders it into HTML, and converts it into PDF format.
- Increased Security of microservices by Developing a Gateway API with JWT Authentication, integrating **8 microservices** into a single unified API using Flask, PyJWT, and Django.
- Designed an AngularJS-based admin frontend web app, with backend in Django to view and update patient records which reduced record updation time by **60%**.

PROJECTS

Graphical Abstract Generator | [Demo](#)

Oct 2023

- Users upload their research articles in PDF format and get a visual representation of their research paper.
- It uses GPT4 to summarize research papers and suggest images, which are then rendered into a template.

AWARDS & ACHIEVEMENTS

- Won **Delivery Champion of the quarter** award based on Apr-Jun 2024 performance
- Won **Team of the year** award for "Team Paperpal"(Jun 2024).
- Won **Project of the Year** award for "Generative Features & Copilot Launch"(Jun 2024).
- Won **Project of the Quarter** award for "Paperpal Copilot"(Sep 2023).
- Secured **2nd** position in GCP GenAI Buildathon(Oct 2023).
- Secured **2nd** position in the Dyson Datathon(Oct 2022).

SKILLS

Programming Languages: Python, JavaScript, Java, C++

Cloud Technologies: AWS Lambda, ECS, EC2, FARGATE, SQS, S3, Terraform, GCP Cloud Functions

Libraries & Frameworks: Flask, Docker, Django, FastAPI, Aspose Java, AngularJS, JQuery, Jenkins, Grafana, ReactJS

Databases: DynamoDb, MySQL, ElasticSearch, Redis

EDUCATION

Indraprastha Institute of Information Technology (IIIT)

Delhi, India

B.Tech. in Computer Science and Applied Mathematics

Aug 2018 – Sep 2022

With Minor in Computational Biology