

ABHISHEK PATHAK

Staff Software Engineer

www.4abhishektopathak.com

github.com/abhishektopathak

4abhishektopathak@gmail.com

Experience

Staff Engineer

scalability tooling python

Airbase ([now acquired by Paylocity](#)) | Remote

2020 - Present

- Airbase is a SaaS platform for managing corporate spends. I lead the Expense Management team on both functional (user-facing product) and non-functional (reliability, performance) domains.
- Currently, I'm heading the (ongoing) initiative to support 10x scale over 2 quarters. Key aspects involve improving API latencies, improving the throughput of background jobs, triaging tech debts, expanding test coverage and setting up a load testing pipeline.
- As an IC, I have driven several single-person initiatives:
 - Redesigned the GL sync framework from periodicity to event-based. This added real-time sync functionality, and also improved throughput.
 - Set up a precomputed framework to improve latencies of data-intensive list view APIs.
 - Authored internal utils and libraries to improve developer output and code maintenance. Examples include an ORM wrapper for writing efficient SQL, caching decorators, a simple N+1 query detector etc
- Being one of the earliest hires, I've also been the primary author of many core features:
 - expense management lifecycle
 - payment workflows
 - Integrations with external services - General Ledgers, OCR, Firebase etc.

Software Engineer

AI infra distributed systems java

SkyMind (YC W16) | Remote

2017 - 2019

- SkyMind was a B2B startup which allowed users to train and run deep learning models in java.
- As one of the core members of a very small engineering team, I helped launch the flagship product, SKIL. I also contributed to subsequent releases by adding plugins support and creating an integration test suite.
- Subsequently, I created a platform to initiate and manage distributed compute jobs (specifically batch training/inference of deep learning models using spark-submit). The platform supported the 3 major cloud providers (AWS, GCP and Azure), exposing a common interface. I owned it end-to-end: author, maintainer and customer support.

SDE-2

web services ML pipelines java

Flipkart | Bangalore

2015 - 2017

- I was part of the founding team for Flipkart Ads.
- Helped build advertiser backend services with the SLA to handle > 1000 RPS throughput with < 1500ms average latencies. Team size: 4 engineers.
- Created a service to predict traffic across pages (time series forecasting on user cohorts). I owned E2E data processing with a throughput of 1TB-5TB/day (it varied seasonally) within defined SLAs. Team size: 2 engineers + 1 data scientist.

Software Engineer

data-driven services python

Goibibo | Bangalore

2011 - 2015

- I was part of the Goibibo founding team. My role was to build a cutting edge data platform (using big data) to surface information which provided us with a competitive edge.
- Built a data platform (using Hadoop + Cloudera + Python) and subsequently led the data team (size: 3 engineers + 1 business analyst).
- Created the audience targeting and flight fare prediction services.
- Created multiple internal tools to take advantage of real-time data ingestion - Wuphf (in-house anomaly detector), Gandalf (BI tool which complemented Tableau) and automating accounting for the company.

Open Source Projects

- Recommender: A simple ALS-based movie recommender. Uses Spark ML + Movielens dataset.
- Harmony: Music player designed to integrate with multiple sources. Built using Go + React.
- Asyncio-job-queue : A POC task queue built on top of Python's asyncio framework.

Education

Indian Institute of Technology, Kanpur

B.Tech (Aerospace Engineering)

2010
