

# Abhinav Singh

+91-9801214845 · abhinav.as1308@gmail.com · <https://github.com/abinator-1308>

<https://medium.com/@abinator-1308>

---

## EDUCATION

### Motilal Nehru National Institute of Technology

Bachelor of Technology (Electronics & Communication Engineering) GPA: 8.38

### DAV Public School

All India Senior School Certificate Examination (Percentage: 94.4)

---

## PROFESSIONAL EXPERIENCE

### CRED

September 2020 - Present

#### Senior Backend Engineer

Partner Platform (July 2022 - Present):

- Managed the entire lifecycle of the Partner Platform, a comprehensive solution empowering partners to oversee onboarding, user experience, KYC compliance, user management, and authentication/authorization (RBAC) through a unified interface.
- Led a team of 4 (3 developers and 1 QA) throughout the platform's development journey, starting from its inception (Day 0) and guiding it from the initial launch (0:1) to subsequent enhancements and expansion (1:n).
- Developed distinct modules for identity management, user administration, templating, lead management, orchestration, and BFF (Backend for Frontend). Introduced a workflow service to oversee onboarding processes, including self-service, assisted, and offline onboarding, as well as KYC compliance. These services were implemented using Java and GoLang. Additionally, Lua-based plugins were created for the API Gateway (Kong). Data storage relied on MySQL, DynamoDb, and Redis, with SQS serving as the messaging platform. Configuration data was stored in SSM and S3, and S3 was also utilized for document storage.
- Successfully scaled the platform to accommodate various business offerings within CRED, such as CRED Pay Online, Offline, and Store. Implemented Hierarchy as a significant feature, encompassing both Business and User Hierarchy. Architected the identity and authentication services to support hierarchical structures and provided guidance for the re-architecture of payment and settlement systems to incorporate hierarchy concepts.
- Transitioned the KYC service from a single-vendor setup to a multi-vendor configuration.
- Conducted rigorous load testing, achieving a throughput of 2300 requests per second (rps) for each API using Locust.
- Designed and implemented a Python-based module to automate the onboarding process for verified merchants.

CRED Cash (September 2020 - July 2022):

- Worked across verticals (Loan Origination, KYC, Disbursal & Core Lending) on Java based microservices initially.
- Owned the onboarding module, and scaled it up from 10 DAU to 1 Mn DAU. Created outbound and inbound flows for interactions & risk assessment across multiple entities (Banks, NBFCs, Risk Assessment Engines etc.)
- Created a liveliness module for fraud detection, which reduced fraud by ~95%
- Automated config validation, Step function updates, code quality checks and integrated them to the Jenkins pipeline

**Fidelity Investments**  
**Software Engineer**

**August 2019 - September 2020**

- Built Client Implementation Tool, a platform exposed to Clients to manage RSU grants for their employees. Containerized it and moved it to Rancher.
- Worked Full Stack on revamping the Unified Events Portal in a 3-tier Microservices based architecture.

**Summer Intern**

**May 2018 - July 2018**

- Migration of Server Management logic to Ansible & Python
- 

**LEADERSHIP ROLES**

- Member of CRED Programming Club
  - Part of Campus Hiring team for CRED from 2021-23
  - Member of FOSS (Free & Open Source Software) India
  - Incharge of Electronics Society, MNNIT (2019)
  - Member of MNNIT CC Club, 2019
  - Core Team, Hack 36 (2019)
- 

**AWARDS/ ACCOLADES**

- Github Arctic Code Vault Contributor
  - CRED Quarterly Performers Award (2020 Q4 & 2021 Q1,Q2)
  - Winner, FOSS United Hackathon
  - GATE Qualified from CSE stream
  - Codeforces Rating: Expert, Codechef Rating: 4\*
  - Runner up, B-Plan, Kshitij 2019, IIT Kgp
  - 52nd Position, DeCode by DE Shaw
  - 3rd, IEEE Quiz, IEEE-Cell, MNNIT 2018
- 

**BLOGS/PUBLICATIONS**

- [Publish-subscribe messaging – an explainer](#), CRED Engineering
  - [System Design Basics: WebSockets](#), Geek Culture
  - [AWS Step Functions: A Low Code Workflow Service to Build Serverless Applications](#), Plain English
  - [How to create a Non-Fungible Token \(NFT\) of your digital artwork](#), CoinMonks
  - [Securing Tokens via JWT in GoLang](#), Geek Culture
- 

**SIDE PROJECTS**

- Mergepro (Built during FOSS India Hackathon 2020): Browser extension to manage and view Pull Requests in efficient and structured manner with real time notifications using GithubAPI, React, Typescript and Mobx for state management.
    - <https://chrome.google.com/webstore/detail/merge-pro/hibagpmdekokmfekffpnknllndfniph?hl=en>
  - ReviewLib: Review Aggregation & Sentiment Analysis
    - [reviewlib.herokuapp.com](http://reviewlib.herokuapp.com)
- 

**KEY COMPETENCIES**

Java  
Spring Boot  
Kong

GoLang  
MySQL  
Redis

AWS  
Python  
NLP