

## EDUCATION

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- **NIIT University** Neemrana, Rajasthan  
*B.Tech in Computer Science; Specialisation Data Science; Minor in Finance; CGPA: 9.75* *Aug. 2017 – Jul. 2021*
- **Amity International School** Noida, UP  
*CBSE Board, Class 12 (Senior Secondary) - PCM Percentage: 92.3%*  
*CBSE Board, Class 10 (Secondary) - CGPA: 10*

## EXPERIENCE

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- **Bigbasket** Bangalore, KA  
*Software Engineer - 2* *Apr 2022 - Present*
  - **Prime Developer for the WMS Effort - Replenishment:**
    - \* Developed critical modules for handling replenishment flows in BB2.0, resulting in the gradual elimination of external dependencies.
    - \* Estimated recurring cost savings of over > **1.5crore/month** through the project's impact.
    - \* Implemented a high-performance service using low-level aiohttp and aiomysql (sqlalchemy), leveraging custom-built abstractions for improved resource utilization and code readability.
    - \* Utilized dataclasses and typing extensively to reduce technical debt and improve code maintainability.
    - \* Led the migration to Async Django for the UI, resulting in highly responsive UI components with < 1s response times, even with complex scenarios involving > 20 API calls.
    - \* Designed and implemented asynchronous consumers capable of processing 12 Kafka messages simultaneously, reducing the need for scaling up consumers.
    - \* Revamped the logging structure, improving indexing and search times for efficient debugging and issue resolution.
    - \* Developed a specialized classifier to address validation problems related to replenishment cases around midnight, effectively eliminating instances of double ordering.
    - \* Identified and built a new CSRF verification module, enabling the business to maintain a large number of open tabs while preserving the state of each tab.
  - **CS Modules:**
    - \* Optimized response time and expanded the availability of interfaces for CS providers such as Tata and Kapture.
    - \* Achieved a significant impact, resulting in cost savings of over > **50Lakh/month**
  - **Enhancing the base bigbasket asyncio package:**
    - \* Worked on enhancing the foundational bigbasket asyncio package utilized by Python services.
    - \* Implemented improvements to increase performance and efficiency, benefiting the entire system architecture.
- Software Engineer I* *Jul 2021 - Mar 2022*
  - **Multi-Tenant (First Service in Company) for SaaS spinoff:**
    - \* Successfully handled the shift of the pilot service (config service) to multi-tenancy, ensuring data isolation without additional infrastructure.
    - \* Architected a new implementation addressing observed shortcomings, including an optimized in-memory caching system.
    - \* Achieved <10ms response times and ensured coherency across tenants using a revamped zookeeper based synchronisation layer.
    - \* Played a critical role in revenue generation from TMS, WMS projects, and SaaS offerings to Croma.
    - \* Contributed to building the base multi-tenancy package for Java-based services at Bigbasket.
  - **Integration with Tata Neu:**
    - \* Developed interfaces for CS integration between Bigbasket and Tata.
    - \* Managed daily external client-side interactions as a fresher.
    - \* Implemented multi-threaded solutions to enhance throughput and reduce response time for improved CS experience. (from >20s to <0.5s)

- **Added Configuration Hierarchy for EC Group:**
  - \* Enabled instant and intuitive configuration of services Pan-India, allowing business-level changes instead of geographical changes.
  - \* Example: configuring services for results such as shutting down bb-now or disabling Tata-Neu.
- **Prime developer behind BBNOW (Instant-Grocery):**
  - \* Designed a new route assignment flow for LMD and implemented a dynamic CEE assignment flow with CEEPool integration.
  - \* Solved issues like dirty read and duplicate assignment through optimized assignment procedures.
  - \* Developed scripts for data setup and automated testing for BBNOW.
  - \* Achieved impressive results: 150 successful store launches, 18.7 lakh new orders and 71 Cr. in sales within a 5-month period.
- **Helm Replenishment Service:**
  - \* Converted the replenishment service to Helm, enabling template-based deployments.

*Software Engineer Intern*

*Jan 2021 - Jun 2021*

- **Added SMS Provider:**
  - \* Revamped bigbasket's SMS system for DLT integration with a new SMS provider.
  - \* Implemented a load balancer to enable a switch from a deterministic approach to a probabilistic approach, improving fault tolerance without manual intervention.
- **Others:** CEE Warning System

## • Barco

Noida, UP

*Intern*

*Jun 2019 - Jul 2019*

- **Real Time Dashboard:** Developed a Real Time Dashboard that aggregated and visualized all performance metrics from the product line.
- **Alert System:** Built an email alert system that would send a custom scripted email to the appointed manager in case of a system failure.
- **Reporting System:** Created a reporting service that would send reports containing raw and aggregated data to authorized individuals at set intervals.
- **Technologies:** SQL Server, Node.js, Node-RED, RMM Server, and SSRS

## PROJECTS

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### • Student Counselling Chatbot:

- Designed and developed a counselling chatbot solution for a career counselling portal/company.
- Successfully deployed the chatbot live in production, providing valuable support to users.
- Received recognition as the competition winner among the final 10 participating teams, securing a cash prize of INR 50,000.
- Led the project from start to finish, handling functional and technical requirements, creating a comprehensive system design document, and undertaking full-stack development.
- Ensured a seamless user experience by focusing on user-friendly features, custom UI design, and support for various devices.
- Implemented input flexibility to accommodate different user preferences and enhance the chatbot's usability.

### • Broke Student Brokers:

- Built an cross platform android/ios app using Flutter to see portfolio and add funds.
- Serverless functions in python created on Google Cloud that would run everyday at 11AM to forecast and perform trades using Alpaca (Simulated), Yahoo Finance and Firebase.

### • Smart India Hackathon - 2020: 'Grand Finalist' (Top 10%) - ISRO (Indian Space Research Organization).

## PROGRAMMING SKILLS

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- **Technologies:** AWS, K8s, Helm, Kafka, GCE, Aerospike, Zookeeper    **Languages:** Python, Javascript, SQL, Java