

AHSAS SOOD

Software Development Engineer | Deloitte | Morgan Stanley
+91 9876997839 | ahsassood@gmail.com

ACADEMIC DETAILS

YEAR	DEGREE/ EXAM	INSTITUTION	MARKS OBTAINED
2016-2020	B.Tech. (ECE), Minor (Finance)	Indian Institute of Technology (ISM), Dhanbad	8.7/10
2015	A.I.S.S.C.E (Class XII, CBSE)	Bhavan Vidyalaya Panchkula	92.6%
2013	Class X	Mission San Jose High School, Fremont, CA	3.84/4.0 (GPA)

PROFESSIONAL AND INTERNSHIP EXPERIENCE

Deloitte - Ministry of Rural Development, Lead Software Development Engineer

April'23 – November'24

- Lead the software engineering vertical in the Data & Insights Unit at the Ministry of Rural Development, GoI
- Project 1: Designed and built a **full stack web application with microservices** using **Angular + Node.js + Typescript** for frontend, **Java + Spring Boot** for backend, **RESTful APIs** for exchanging data and **PostgreSQL** as database to build a recommendation system within the [official MIS for NRLM](#) (National Rural Livelihood Mission) for fund allocation from the central government to state/district/block governments for Self Help Groups. The system allowed for **equitable distribution** of funds across the **country**. Created an extensive **documentation** which is used by multiple development teams across MoRD.
- Project 2: Designed and developed the **Android frontend and backend** for a citizen-centric module in the [official Janmanrega app](#) (used by over **140 million** applicants of National Rural Employment Generation Act), using **Android SDK + Java + MySQL**. Built **RESTful APIs**, implemented **secure authentication**, and **constructed and optimized database queries** to enable real-time access to attendance and payment details; receives **3 million searches per month** with over **48 million** to date
- Designed and implemented intricate **SQL queries to optimize database performance and streamline data retrieval processes** for PowerBI dashboards by **exposing APIs using Java and Spring Boot** and collating data using **Python scripts**
- Introduced **Git based version control** workflows to MoRD, conducted training sessions, set up repositories, streamlined collaboration across multiple teams
- Received Letter of Appreciation from Joint Secretary (IT), MoRD for contribution in Data & Insights Unit

Morgan Stanley, Senior Associate (Software Development Engineer)

August'20 – March'23

- Lead the eSign team as a **full stack developer** which **eliminated dependency on paper** for legal banking forms for Morgan Stanley clients increasing accessibility across the globe - Tech Stack: **Java + Spring Boot + Angular + DB2**
- eSign portal is used by financial analysts across all branches of Morgan Stanley to **digitally** send packages to retail clients and receive signed packages back for all financial services offered by the bank - account opening, account transfer, trading, etc.
- Was responsible for feature development of the web application in a scalable and maintainable manner using **Splunk for log maintenance and error detection**, following **Agile methodologies** with stand ups, product refinement sessions and retrospectives and biweekly releases via **Jenkins CI/CD pipelines**
- Contributed to conversion of 16.9M E*TRADE clients from Broadridge back office to Morgan Stanley back office as a part of the firm's integration with E*TRADE using **Spark Engine**.
- Project 1: Developed a 'Batch Auto-Diagnosis and Remediation' System which helped reduce the **Mean Time to Identify (MTTI)** and the **Mean Time to Resolve (MTTR)** the failed jobs during batch processing by removing manual intervention. The framework **saved money, improved productivity and reduced risk** by performing analysis on job executions in real time by streaming logs using a **Kafka broker**. The architecture was implemented using the **Azure CI/CD pipeline** to accommodate for spikes in batch logs.
- Project 2: Finalist for Technology Innovation Program for 'Giving back' for developing a UI quality gate to **enhance accessibility of web content for people with disabilities**
- Developed a code quality check system using **SonarQube** and its plugin used with **Jenkins** to ensure metrics are met before merging, the system was extended to all consumers of web and desktop application test automation framework
- Built a trading engine by creating an **MVC** pattern based service structure using **RESTful** requests and message queues for communication. Also built a shell similar to standard Unix shell with basic functionality using `fork()` and `exec()` system calls

Turquoise Automation, Full Stack Developer, Part Time

August'19 – October'19

- Created a bill tracking and data access portal using **Typescript + React** library
- Created backend services for data visualization using **Java + Spring Boot + Hibernate + PostgreSQL**
- Application allowed users to view list of uploaded bills with an additional page to adjacently view bill and item details pulled from it in a tabular format using **AgGrid** as well as for data visualization using **Recharts**.

General Electric, Intern, Pune

June'19 – July'19

- Calibrated and repaired instruments used in aviation, health care, power, oil and gas industries
- Designed a **more efficient, suited, detailed lab procedure** that was **adopted by Pune facility** for future order processing
- Procedure incremented the GE Oil and Gas service lab business by over 8 lakhs due to purchase and calibration orders

BACA Systems, Intern, Orion Charter Township, MI, USA

May'18

- Reconstructed the control panel for BACA Robo SawJet product from scratch
- The controller **took up less room, was more organized and easier to handle** as compared to the previous model

PROJECTS

Publications

- 'Book Review | Ain't I A Woman: Black Women & Feminism By bell hooks,' Feminism in India, Sept 2021
- 'Raising Engineers and Housewives,' Proactive for Her, Jan 2021

Election Data Analysis

May'19

- Used 2019 Indian elections' data to clean, prepare and analyze dataset for meaningful **data visualization**
- Implementation using **numpy, pandas, seaborn and matplotlib in Python**

Hand Gesture Recognition

March'18

- Won second prize for designing a wearable glove for people with a speaking disability to communicate using sign language. Arduino Uno was paired up with 16X2 LCD Display and HC05 Bluetooth Module to allow the messages to be displayed on a screen and read out loud.

VOLUNTEER AND LEADERSHIP EXPERIENCE

- **Katalyst Mentor, via Morgan Stanley**
 - Completed 33+ hours of volunteer service by training underprivileged girls in data structures and algorithms
 - Resolved doubts and enabled students to secure job opportunities in software development
- **Institute Girls Nominee, Administrative Team for Cultural Societies, IIT (ISM) Dhanbad**
 - Regulated between the faculty and students in matters concerning the cultural societies and clubs of the institute.
 - Lead the Dance Society of the college at various competitions all over India as the Coordinator.
 - Ingrained a culture promoting enthusiasm for the performing arts by regularly organizing workshops and various events entertaining over 25 teams and 500 individuals from around the country as a part of the cultural fest
- **Founder, Women Empowerment Cell, IIT (ISM) Dhanbad**
 - Conducted surveys within a 4 kilometer radius of IIT (ISM) Dhanbad regarding the status and responsibilities of women in their households, education of girls.
 - Spread awareness regarding the importance of education, cleanliness and sanitation, increasing the classroom strength of local NGOs by 40 percent
- **Event Management Coordinator, ACM (Association for Computing Machinery)**
 - In-charge of organizing coding and non-coding events through the year for over 7000 students.
 - Organized Hackfest, IIT (ISM) Dhanbad collaborating with Samsung, Amazon, Hackerearth entertaining 35 teams for 36 hours to deliver one of the most stimulating hackfests ever.
- **Technical Head - Spectrum'17, Society of Electronics Engineers**
 - Coordinated with Robotics Society, Marketing and Sponsorship divisions, Alumni Connect and Dance and Music Societies to ensure proper planning and delivery of the fest
 - Organized various events through the year as a part of the core team of the Society of Electronics Engineers

ACHIEVEMENTS AND INTERESTS

- Secured All India Rank 5302 in JEE (Advanced), finished within top 0.2% of the 1.5 million applicants
- Secured 2nd Position in Hackfest 2018, IIT (ISM) Dhanbad
- Secured 3rd Position in Group Dance Competition, Srijan 2019, Dhanbad
- Secured 3rd Position in Stage Dance Competition, Inter IIT Cultural Meet 2018, Roorkee
- Secured 3rd Position in Duet Dance Competition, Srijan 2018, Dhanbad
- Secured 4th Position in Stage Dance Competition, Inter IIT Cultural Meet 2017, Kanpur
- Secured 5th Position in Stage Dance Competition, Inter IIT Cultural Meet 2016, Bombay
- Secured 2nd Position in school in Class 12th boards with 97.6 percentile among candidates all over India