

# Khushi Gandhi

+1 (413)-510-7054 | Amherst, MA | [khushiigandhi2405@gmail.com](mailto:khushiigandhi2405@gmail.com) | [in/khushi2405](https://in/khushi2405) | [github.com/khushi2405](https://github.com/khushi2405) | [Portfolio](#)

## EDUCATION

**M.S. in Computer Science | CGPA: 4/4**

Expected Graduation: May 2026

*University of Massachusetts, Amherst Massachusetts*

• **Relevant Coursework:** Database Design, Data Science, Advanced Algorithms, Information Retrieval

**Codepath**

Jan 2025 - May 2025

*Completed Technical Advanced Interview Prep and Web Development Courses*

**B.Tech in Information Technology | CGPA: 8.94/10**

June 2018 - June 2022

*Manipal Institute of Technology, Karnataka, India*

## TECHNICAL SKILLS

**Languages:** Java, C++, Python, HTML, CSS, Javascript, GraphQL, SQL

**Frameworks:** Springboot, React, Vue

**Tools and Platform:** Git, Google Cloud (Digital Leader Certified), REST APIs, GraphQL APIs, MySQL

## EXPERIENCE

**Software Developer Intern | Interactive Brokers - Connecticut, US**

Jun 2025 – Present

- Reduced routing complexity by building a dynamic Vue.js breadcrumb using navigation guards and route parsing, eliminating hardcoded logic across 15+ components.

**Software Developer | Deutsche Bank - Pune, India**

July 2022 – August 2024


- Collaborated with cross-functional teams of **50+ members** in an **agile environment** to deliver **scalable fintech applications** for onboarding banking clients, raising alerts to identify potential threats to ensure compliance.
- Improved data job uptime by **30%** by engineering a robust fallback mechanism in Spark workflows to handle third-party service disruptions
- Designed, developed, and deployed backend services enabling user authorization, alert management, report generation, and automated notifications by following **SDLC** best practices.
- Implemented **12+** end-to-end **GraphQL and REST API** queries to streamline UI-backend interactions across **5 microservices**, along with developing multiple **SQL queries** for efficient data retrieval and synchronous transmission.
- Enhanced production stability by identifying and resolving **15+** critical issues through rigorous system integration testing and code reviews, ensuring smooth rollout of new features.

## PROJECTS

**IMDB Query Engine | Java, SpringBoot, Maven** 

Jan 2025 - April 2025

- Designed a **relational query engine** to simulate large-scale product analytics systems, incorporating a custom buffer manager that reduced disk I/O overhead when retrieving pages from over **70 million** records (spanning more than **10GB** of data) using an **LRU** replacement policy and hash-based lookup.
- Improved search query performance by up to **100×** over sequential scans by implementing a **B+ Tree** indexing mechanism supporting fast searches on both clustered and unclustered indexes.
- Built a relational query executor from scratch to process records from **3** relational tables, designing scan, selection, projection, materialization, and **Block Nested Loop (BNL)** joins operators using a fixed execution plan.
- Ensured **99%** test coverage, improving code reliability by writing end-to-end test cases using **JUnit** and **Mockito**.

**SilentSpeak : Muted Speech Detection Using Jaw Motion | C, Python** 

Oct 2024 - Dec 2024

- Developed a **motion-based command recognition** system using IMU sensors to capture jaw movements during any real-time speech and trigger phone actions based on these commands.
- Applied motion data and ML classifiers to infer commands, achieving **88%** accuracy.
- Awarded **‘Best Project’** for creating an innovative, noise-resilient, privacy-conscious speech recognition system that offers an inclusive solution for environments where audio-based systems are impractical.

## LEADERSHIP EXPERIENCE

- Led a team of **10** members in a 24-hour **global hackathon** in Deutsche Bank to develop an AI-powered application for customer support, automating responses, managing, and generating reports.
- Conducted corporate wellness and posture sessions for over 150 Deutsche Bank employees as a certified yoga instructor with more than 200 hours of training.