

ABHINAV GANGADHARAN

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EDUCATION

Northeastern University

Boston, Massachusetts

Master of Science in Computer Software Engineering — GPA: 3.8/4

Aug 2025(Exp.)

Relevant Courses: Data Structure and Algorithms, Cloud Computing, AI Agent Infrastructure, Data Science Engineering Methods, Web Development Tools

Thapar Institute of Engineering and Technology

Punjab, India

Bachelor of Engineering in Electronics and Communication Engineering

May 2020

Relevant Courses: Data Structures, Operating Systems, Soft Computing, Computer Architecture

EXPERIENCE

SwaptQR

Boston, MA

Fullstack Developer Intern

September 2024 - December 2024

- Architected a microservice for short URL/QR code generation, enabling streamlined marketing campaigns and improved user access to content, deployed to 500+ daily users.
- Implemented CI/CD with blue/green deployments via GitHub Actions, Jenkins, and Groovy, cutting release times by 40%.
- Generated client-specific engagement insights via complex database queries, driving data-backed UX and business optimizations.
- **Technologies: React, Typescript, Python PostgreSQL, Docker & Kubernetes**

ZS Associates

Gurugram, India

Software Developer - Platform Services Division

August 2021 - July 2023

- Engineered ETL pipelines and dashboards using Java, SQL, and Airflow; integrated REST APIs on AWS, boosting pharma data processing speed by 35%
- Devised scalable Python-based automation for data transformation, cloud file management, and analytics—boosting operational efficiency by 40% and reducing third-party tool dependencies.
- Mentored over 50 new employees, conducting training sessions and knowledge-sharing workshops to accelerate their integration into the development environment.
- **Technologies: T-SQL, Java, Python, AWS & other proprietary frameworks**

Cubastion Consulting

Gurugram, India

Android Developer

January 2020 – December 2020

- Restructured a product maintenance ticketing system for a Native Android mobile application used by technicians of a multinational home appliances company, resulting in over 10,000 downloads
- Optimized the internal leave application for the company mobile app by re-engineering the backend process, reducing processing times by 50%
- Built a vertically scrolling video page for a national news company on Native Android, for an intuitive user experience on an application with over 1 million downloads
- Created an in-house tool using Android SDK to enable region-based click detection on images, boosting user engagement by 25%
- **Technologies: Android SDK, Spring Boot**

PROJECTS

Monte Carlo Tree Simulation(MCTS) on Board Games | Java

2024

- Implemented an MCTS algorithm for Tic-Tac-Toe, optimizing AI decision-making process and boosting gameplay efficiency by 30% through intelligent exploration and precise move evaluation
- Implemented Mini-max algorithm for Checkers to enable a user to play against the computer with varying levels of difficulty.

Music Recommendation System | SciKit-Learn, Numpy, Pandas

2023

- Devised an Unsupervised Machine learning model which provides recommendations based on a Spotify songs dataset spanning from 1920 to 2020, model training based on various qualities of music such as tempo, instrumentals, energy
- Compared various algorithms like Cosine Similarity, KNN, and KMeans, achieving high accuracy on Cosine similarity and KNN based off of user feedback