AFFAN ARIF KHAMSE

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EDUCATION

New York University New York
Master of Science in Computer Science (GPA: 3.778/4) *Expected May 2025*
Courses: Operating System, Software Engineering, Data Science, Databases

University of Mumbai Mumbai, India
Bachelor of Engineering in Computer Engineering (GPA: 9.00/10) *June 2023*

TECHNICAL SKILLS

Programming Languages:	C++, Java, Python, HTML, CSS, JavaScript, SQL
Frameworks and Libraries:	Spring framework, ReactJS, Django, REST API
Testing Frameworks:	Junit, PyTest, Django.test
Database Management Technologies:	MySQL, PostgreSQL, Hibernate ORM, Firebase
Cloud Computing and DevOps:	AWS, CI/CD, Travis CI, Docker, Azure DevOps
Other Technologies:	Android Development, Agile Development, Git, Bootstrap

RELEVANT EXPERIENCE

New York University

Full-Stack Software Developer May 2024 – Present

- Spearheaded the development of "NYU Mate," an innovative coure assistant and content management system that significantly improved student engagement and learning efficiency by providing instant answers to course-related questions using professor-provided notes and files.
- Delivered end-to-end solutions as a Full Stack Engineer, seamlessly integrating ReactJS for a dynamic front-end and Flask (Python) with Firebase (NoSQL) for a robust and scalable back-end.
- Designed and implemented RESTful APIs as microservices for database operations, including retrieving, pushing, and deleting information, ensuring scalability and modularity.
- Enhanced project delivery through Agile methodology, leading daily sprints and coordinating efforts with cross-functional teams via Azure DevOps.
- Expanded the system's applicability across various industries beyond education, demonstrating versatility and driving broader adoption.

Graduate Teaching Assistant Jan 2024 – May 2024

- Provided one-on-one and group mentoring to over 50+ undergraduate students in Object-Oriented Programming, enhancing their proficiency in C++, Java, JVM, UML diagrams, and Object-Oriented Programming principles.
- Evaluated and graded assignments for the "Programming Tools for the Data Scientist" course, ensuring timely and constructive feedback on Python, Regular Expressions, NumPy, SciPy, Pandas, and Data Visualization, contributing to a 20% improvement in student grades.

Google Developer Student Club BVCOE

Student Developer Aug 2021 – July 2022

- Developed and launched a website for the Google Developer Club with a team of 5 members using the React.js framework.
- Organized key events in cloud computing, web, and Android development, resulting in a virtual workshop with over 300 attendees, showcasing interactive tech learning.

ACADEMIC PROJECTS EXPERIENCE

VibeCheck GitHub
Django, Python, Bootstrap, AWS, Supabase PostgreSQL, Redis Channels, TravisCI/CD, Hugging Face

- Led the development of "VibeCheck," an innovative music-based social networking web-application, utilizing the Spotify API to create a dashboard reflecting user listening habits and overall musical vibe in 15 different emotional expression.
- Improved user interaction by integrating Redis Channels and WebSocket for a chatroom feature. Achieved a 50% increase in speed over traditional HTTP, enabling real-time communication among users.
- Addressed critical deployment challenges by hosting large models on Hugging Face and utilizing API calls for its access.
- Deployed of VibeCheck on AWS, focusing on Travis CI for automated testing and deployment. Ensured seamless integration and deployment workflows, utilizing AWS Elastic Beanstalk and Redis (ElastiCache) for improved performance and reliability.
- Enhanced reliability through comprehensive unit testing with Django.test, achieving 87% coverage, significantly improving application quality and maintainability.

Store Inventory Management System
Spring MVC, Java, MySQL

- Developed a Java Spring Web Application for store inventory management, integrating a MySQL database for robust data handling. Improved operational efficiency and inventory tracking, ensuring scalability.
- Conducted CRUD operations on store inventory through software implementation.
- Integrated Itext maven library to generate customized PDF invoices, streamlining the billing process.