

Having spent more than a decade in building and testing automation frameworks for IT teams of large enterprises undergoing digital transformation, I have been a close observer of the QA automation domain's evolution from monolithic, functional testing approach to a more AI-enabled methodology. I have also realized that to be good at what I do for a living, I have to continuously adapt to the agile, fast-changing automation landscape, as business owners look for more intelligent automation in their workspace. This is a strong motivator for me to upskill in the broader areas of computer science and specialize in aspects of Machine Learning, Artificial Intelligence, and cloud-native applications, that will allow me to build better automation strategies for enterprises looking to cut down on the Opex and Capex and drive profitability. After careful scrutiny of several graduate programs and discussions with my peers/GaTech alumni, I firmly believe that the MS in Analytics program of GaTech provides me with a unique opportunity to build upon my skill set, while pursuing my full-time career, to achieve my career goals.

I am equally confident that my experience gathered over the last 12 years, working with a variety of programming languages, tools and technologies, and software design principles, will lay the pathway for success in the course and will be a value addition to my program colleagues.

The first five years of my professional career were spent at India's largest IT consulting and services firm where I created test automation proof of concepts using Python, SQL queries, and designing ETL mappings. I worked on multiple test case scenarios, designing and executing them, as per business requirements. During this stint, one of my flagship projects entailed setting up of functional and system integration test frameworks for the IT org of a Fortune 500 insurance major. Moving to the client location in Minneapolis, US helped me get more mindshare with the business owners and discuss their challenges firsthand. I figured out that I was able to design accurate test strategies and set up testing methodologies using Informatica and SQL by liaising with stakeholders along with Continuous feedback

After spending half a decade in TCS, I made a move to another IT major, where I led a team of 6 developers in architecting automation suites of policy administration solutions for insurance carriers. Here, I made extensive use of tools like Postman with Groovy to set up the integration tests for REST API testing. I also developed test cases using WSDL(Web Services Definition Language) which defines web service request, response methods/operations. Along with the hands-on experience, I consistently looked for opportunities to upskill and took courses in Big Data from Edureka and learned Java, which became a stepping stone for multiple other opportunities.

One such project had me shipped off to Australia, to develop automation test suites to detect threats and fraudulent transactions for National Australia Bank. Working on their financial crime technology platform, I leveraged Java with BDD and Spock using AWS and Jenkins to identify key defects like memory allocation issues, missing metrics to identify fraudulent transactions in the early stage of functional testing of anti money laundering policies and rules involving economic and trade sanctions. Our team also supported the client to move away from a legacy based application to microservices architecture, along with transitioning from manual testing to an automated set up, saving 80% of operating time.

Shortly after the successful execution of the above-mentioned project, I joined an AI-based consulting firm in Australia, where I led the development of a backend test automation suite, to test the APIs for a new digital banking platform of a multinational venture capital conglomerate. The integration platform was developed using Azure API Management. I was able to design a solution using Karate API automation and Azure

CI/CD as well, which resulted in a comprehensive backend automation test suite testing hundreds of APIs before getting integrated to the front end systems. During my tenure at Deloitte, I began volunteering in their data team's Center of Excellence, which led to exploring concepts of Kafka through Confluent training.

All these learnings culminated in my current role at Australian Securities Exchange. Here, I pilot a key digital transformation project, which aims to replace the core legacy system by microservices built using Spring boot java with Kafka, run in docker containers and deployed using Kubernetes. I have designed test automation frameworks which will test the streaming messages as well performance of an entire ecosystem involving various micro services in the data sphere. This project challenges me each time as we progress towards adding complex features like enhanced JSON log validations to Kafka multi-header validations which are exclusive enhancements done to our test automation framework to help the application support team in analyzing the error logs effectively much earlier in the software lifecycle. Developing a test automation suite using Gatling and Scala for analysis of performance of each microservices has helped the team in gauging the throughput of the services processing records ranging from 20,000 to 10,000,000 on a peak daily volume.

Making effective use of my time post work, I have always strived to gain knowledge by attending different meet-ups especially related to data engineering, women in Tech, Girl Geek Sydney and cloud computing. Of late, I have joined Kaggle to deepen my knowledge in Machine Learning by collaborating with different users and solving data science challenges.

What I now look forward to in the Analytics coursework is to substantially expand my understanding of AI/ML technologies, and understand how they are being leveraged in designing smarter, data-driven frameworks. Courses such as CS 6290 - High Performance Computer Architecture, CS 7646 - Machine Learning for Trading, CS 6601 - Artificial Intelligence, pique my interest. My forward-looking goal is to master the techniques to analyze big data and assist technology giants such as Google, Amazon and Microsoft to build cutting-edge products for the digital age. With such a pioneering pool of faculty members and peer/alumni group at GaTech, I feel truly excited about the possibilities that can come along.

I hope the Admission Committee finds merit in my application and offers me a place in the distinguished class of 2023.