

SUMAN ROY

Active **IRS MBI** Tier 2 Clearance || **US Citizen** || **DHS Certified Trusted Tester**

PROFESSIONAL SUMMARY

- Over 8 years of experience in software testing, proficient in working with web-based applications using both manual and automation testing techniques.
- Proven experience across the full Software Development Life Cycle (SDLC) and Software Testing Life Cycle (STLC), working in Agile Scrum and Waterfall environments.
- Hands-on involvement in business requirement gathering, documentation (BRDs, FRDs, user stories), stakeholder communication, and test case traceability.
- Skilled in translating business requirements into functional specifications and test deliverables, bridging the gap between business and technical teams.
- Developed, implemented, and maintained end-to-end automation testing frameworks using Cypress, JavaScript, Mocha, and Selenium WebDriver with Java.
- Proficient in automation frameworks, including Data-Driven (DD), Behavior-Driven (BDD), and Test-Driven Development (TDD), utilizing Page Object Model (POM) design patterns.
- Skilled in Object Oriented Programming (OOP) using the Child and Parent Classes.
- Strong background in Manual Testing, Automated Testing, Functional, Smoke, Integration, Security, System, UAT, and Regression testing.
- Hands-on experience with Mobile Application (**iOS** and **Android**) & Cross-browser testing using BrowserStack.
- Experienced in writing and executing complex SQL queries for data validation and backend testing to ensure data integrity.
- Converted manual test cases into automation scripts using Selenium WebDriver, Java, TestNG, Cucumber, and Junit.
- Adept in REST API testing using Postman, Swagger, and SoapUI, along with performance testing using Apache JMeter.
- Experienced in validating data accuracy and ETL workflows using Robo 3T (MongoDB) and DBeaver for database verification and analysis.
- Hands-on experience in Power BI QA testing, ensuring data consistency, report validation, and dashboard accuracy through source-to-report comparison.
- Strong exposure to healthcare and government domains, including Integrated Eligibility (IE) systems and Health Insurance Exchange (HIX) platforms.
- Skilled in version control (Git, GitHub), build tools (Maven), and CI/CD automation using Jenkins.
- Extensive experience using project and test management tools, including JIRA, IBM Rational Team Concert (RTC-CLM), ALM, and Confluence.
- Proficient in Azure DevOps Services and AWS for cloud-based testing and deployment solutions.
- Certified Trusted Tester (TTv5) with deep expertise in Section 508 compliance testing using assistive technologies like JAWS, ZoomText, Dragon NaturallySpeaking, ANDI, CCA, and WAVE.
- Strong communicator with a history of working directly with internal teams, external stakeholders, and business partners to gather requirements and resolve issues.
- Skilled in creating test artifacts, including test plans, test scenarios, test cases, test scripts, test specifications, and traceability matrices.

CERTIFICATIONS

Trusted Tester (TTv5) Section 508_DHS

Software Testing with **Generative AI**_SimpleLearn

Introduction To **MongoDB**_SimpleLearn

ISTQB Certified Tester Foundation Level_In Progress

Cloud Computing Fundamentals_IBM

Digital Skills: Artificial Intelligence_Accenture

EDUCATION

Bachelors:

National University of Bangladesh, Bachelor of Science.

Masters:

National University of Bangladesh, Master of Science.

SKILLS

Accessibility: JAWS, Zoom Text, Dragon Naturally Speaking, NVDA, Windows Eyes, ANDI, CCA, WAVE, VoiceOver, Fusion, aXe, Microsoft Insights, ACRs, and DubBot.

Testing Tools: Selenium WebDriver, Selenium IDE, Java JUnit, TestNG, Eclipse, AWS, Apache JMeter, Swagger, Cypress, Mocha, Robo 3T, Playwright, Fitness, BrowserStack, Ruby on Rails, UiPath, Transmitter App, **SoapUI**, **Splunk**.

Business Analysis & Requirements Gathering: BRD, FRD, User Stories, Use Cases, Agile Ceremonies, Stakeholder Communication,

Requirement Traceability Matrix (RTM), Functional Gap Analysis.

Test Management Tools:

RTC-CLM (QM, CM), **JIRA**, **X-ray**, Confluence, ALM, **SharePoint**, **Microsoft Teams**, **OneNote++**.

Databases: MS Access, **Oracle**, **Microsoft SQL** Server, **Splunk**, **DBeaver**, **Kafka**, and **Pegasus**, **IBM Mainframe**, **IDRS**, **InfoConnect Reflection**.

Microsoft 365 Suite: Word, Excel, PowerPoint, Outlook, and OneNote.

EXPERIENCE

Back-End Test Engineer

IRS, GMF Mod Project

S2 Technovation Inc. | Ashburn, VA | Nov.2025 to Present

Responsibilities:

- Performed functional, Integration (SAT/FIT), Performance, and end-to-end testing for IRS **GMF Modernization** initiatives, ensuring compliance with enterprise-level quality standards.
- Designed, executed, and validated API test cases using **SoapUI**, including request/response validation, assertions, and data-driven testing.
- Conducted backend data validation using **Oracle** Server to verify data integrity, transformations, and transaction accuracy across systems.
- Utilized **DBeaver** for database connectivity, query execution, data analysis, and cross-database comparisons during testing cycles.
- Validated real-time data flows using **Kafka**, ensuring message production, consumption, and error handling across distributed systems.
- Utilized **Splunk** to ingest, index, and analyze large volumes of structured and unstructured log data from applications, servers, and cloud environments for real-time monitoring and troubleshooting.
- Collaborated with cross-functional teams to investigate incidents, perform root cause analysis, and enhance system reliability and security posture through proactive log monitoring.
- Supported testing and validation of IRS systems integrated with **Pegasus**, ensuring correct data exchange, processing logic, and system behavior.
- Collaborated closely with Developers and System Architects to understand functional requirements, data mappings, and system interfaces.
- Created and maintained detailed test cases, test scenarios, and test execution reports aligned with IRS enterprise testing standards.
- Identified, logged, and tracked defects using defect management tools **JIRA**, providing clear reproduction steps and supporting evidence.
- Participated in Agile ceremonies including sprint planning, backlog grooming, daily stand-ups, sprint reviews, and retrospectives.
- Supported regression testing efforts during new releases, enhancements, and hotfix deployments across multiple IRS test environments.

- Conducted **end-to-end functional, integration, and regression testing** using **IBM Mainframe**, ensuring accurate taxpayer account processing and compliance with federal requirements.
- Utilized **IDRS (Integrated Data Retrieval System)** to retrieve, validate, and analyze taxpayer account data, ensuring adherence to IRS business rules, data integrity standards, and federal regulations.
- Executed and validated **mainframe command codes, transactions, and batch/online processing**, performing account reconciliation and calculation verification across IRS modules.
- Assisted in test data preparation, environment validation, and test readiness activities to ensure smooth execution of planned test cycles.
- **Lead Section 508** testing on the IRS GMF MOD project.
- Collaborate with the IRS 508 OneSDLC Deployment team to complete the deployment of the release.
- Complete **APT** (Applicable Provisions and Testing) and submit to the IRAP.
- Invite the 508 SDLC team (IRS 508 Program Support Team) and perform a Live demonstration of 508 testing.
- Collect final sign-off and deployment recommendation letter from the IRAP for 508 testing.
- Perform usability testing sessions with visually impaired users, leveraging the **JAWS** and **NVDA** screen readers to simulate real-world accessibility scenarios. Verify the content order and ensure proper focus management to enable a seamless, logical navigation experience.
- Employed **Dragon** Naturally Speaking voice recognition software to perform hands-free accessibility testing of web applications, ensuring inclusivity for users with motor disabilities.
- Utilize **ZoomText** screen magnification and reading software to evaluate web applications, ensuring readability and usability for users with low vision.
- Support the test team by creating new team meetings, uploading and updating important documents, and organizing them according to the release to the IRS **SharePoint** for the GMFMOD location.

Functional Tester & 508 Analyst

IRS e-Service, **TDS** Modernization (BOLA/IOLA) Project
Leidos Inc. | Virginia, VA | Nov.2023 to Nov.2025

Responsibilities:

- Collaborated with the Business Analyst team to gather, document, and analyze business and functional requirements.
- Participated in requirements elicitation sessions, interviews with stakeholders, and review of existing system documentation to ensure a clear understanding of project goals and end-user needs.
- Assisted in preparing Business Requirement Documents (BRDs), Functional Requirement Documents (FRDs), and Use Case Specifications.
- Skilled in creating, modifying, enhancing, and developing different automation frameworks, such as Data-Driven (DD), Behavior-Driven (BDD), and Test Driven (TD), using Page-Object Model (POM) design patterns.
- Professionally skilled in creating, modifying, enhancing, and maintaining automation scripts using **JAVA**, Selenium WebDriver, TestNG, Cucumber, and Junit.
- Facilitated communication between technical teams and stakeholders to ensure requirements were clearly understood and implemented correctly.
- Supported UAT planning by mapping business requirements to test cases and assisting stakeholders during the UAT execution phase.
- Contributed to change management activities, helping document scope changes and updates to project artifacts.
- Collaborated with Business Analysts to establish comprehensive test cases, test plans, and test data, ensuring thorough coverage of business and functional requirements.
- Actively participated in key Agile ceremonies, including Product Backlog refinement, Sprint Planning, Sprint Backlog management, Daily Scrum Calls, Sprint demos, Retrospective Meetings, Weekly Status Meetings, and discussed issues/improvement opportunities with the Program Manager.
- Determined the test schedule, system test entrance and exit criteria, and test environment requirements for the Application Under Test (AUT).
- Participated as a manual tester on projects as needed, including validating QA builds and verifying defects.
- Played an active role in conducting Functional, Regression, Integration, and End-to-End Testing to ensure seamless compatibility of the new build across all browsers at every testing phase.

- Perform functional testing in various IRS **Test Environments** such as EUP AQT, SAT, IVES, and RUP environments.
- Conduct **Regression** test using **JMeter**. Create **JMX** and **CSV** files to generate PDF, HTML, and text transcripts.
- Modify **JSON** files to add values to different elements and turn ON/OFF indicators as needed for the test.
- Conduct testing in **Legacy Vs Modernized** Transcript Systems.
- Proficient in **IBM Rational Team Concert (RTC)** using the Collaborative Lifecycle Management tool **CLM-CM** to create defects and **CLM-QM** to create high-level test suites, test cases, and test scripts.
- Regularly performed On-Call duties utilizing monitoring tools like New Relic, Splunk, and AWS.
- Conducted application testing across QA, Staging, and Production environments.
- Collaborated closely with developers to understand how new features are implemented and how bug fixes might impact the system.
- Worked independently and in a tightly coordinated team of functional QA analysts in day-to-day testing activities.
- Involved in testing, production-related issues to support the production team, and **Hotfix** activities.
- **Lead Section 508** testing on the IRS Transcript Delivery System Modernization (**TDS MOD**) project.
- Collaborate with the IRS 508 OneSDLC Deployment team to complete the deployment of the release.
- Submit 508 **Initiation Form** (Initial Product and Prior to Production Deployment) to **IRAP**.
- Complete **APT** (Applicable Provisions and Testing) and submit to the IRAP.
- Invite the 508 SDLC team (IRS 508 Program Support Team) and perform a Live demonstration of 508 testing.
- Collect final sign-off and deployment recommendation letter from the IRAP for 508 testing.
- Provide AT (Assistive Technology) user guide for the **TDS-MOD** users.
- Perform usability testing sessions with visually impaired users, leveraging the **JAWS** and **NVDA** screen readers to simulate real-world accessibility scenarios. Verify the content order and ensure proper focus management to enable a seamless, logical navigation experience.
- Employed **Dragon** Naturally Speaking voice recognition software to perform hands-free accessibility testing of web applications, ensuring inclusivity for users with motor disabilities.
- Utilize **ZoomText** screen magnification and reading software to evaluate web applications, ensuring readability and usability for users with low vision.

Section 508 Test Engineer

Atos Group | Webster, NY | Jun 2020-Nov 2023

Responsibilities:

- Hands-on experience in implementing a DevOps pipeline using Jenkins and the AWS CI/CD tool sets
- Created cucumber features using Gherkin language for BDD test development.
- Proficiently utilized Jira Agile to plan, create user stories, define tasks, develop test cases, track defects, and manage iterations. Documented testing process in Confluence.
- Developed, implemented, and maintained an end-to-end automation testing framework utilizing Cypress, JavaScript, and Mocha.
- Developed Page Object Model (POM) design pattern to keep all the page objects separate and used Maven as a dependency management tool.
- Coding experience with Java and JavaScript (Node.js)
- Collaborated with Quality Assurance, Development, and Business teams to execute thorough testing on significant software releases.
- Gathered Business Requirements, Functional Requirements, and Design Documents.
- Collaborated with development teams to address accessibility defects.
- Executed cross-browser and cross-platform testing with Playwright and other tools.
- Created detailed test cases and scripts based on business requirements in Jira.
- Ensured data integrity through backend testing and validation.
- Integrated accessibility testing into the software development lifecycle to identify and resolve issues early.
- Conducted Section 508 and WCAG audits using manual and automated tools.
- Performed Section 508 testing on XDM functional tickets as needed for UI changes. Performed Full Section 508 scans of the entire XDM web application. Compared backend SQL datasets with the front-end web application of XDM.

- Leverage **ANDI** (Accessible Name & Description Inspector) during accessibility testing to assess the accuracy and effectiveness of accessible names and descriptions for web elements, such as frames, images, links, form fields, color contrast, and buttons.
- Analyze **WAVE** during 508 testing to verify all web elements, including Header, Footer, Link, Image, and Contrast.
- Utilized **CCA** (Color Contrast Analyzer) to calculate color contrast ratios between foreground and background elements, aiding in identifying instances where contrast fails accessibility standards.
- Used **Axe** to identify and report violations of accessibility guidelines, such as missing alt text or color contrast problems. Integrated into different development environments, including browser extensions.
- Successfully identified and documented accessibility defects using ACRT (Accessibility Compliance Reporting Tool) and manual testing techniques.
- Contributed to the creation of accessible documentation and training materials for internal teams.
- Created detailed Test Cases in Jira, based on Business Requirements.

Quality Assurance Tester

J. Crew | New York, NY | Jul 2018-May 2020

Responsibilities:

- Developed and maintained test plans, scenarios, and automation scripts.
- Conducted functional, regression, and UAT testing to ensure application quality.
- Collaborated in Agile ceremonies and contributed to sprint deliverables.
- Used **SQL queries** and tools such as **Robo 3T** (for MongoDB) and **DBeaver** (for relational databases) to perform backend data validation, integration testing, and data analysis. Contributed to the development and maintenance of Automation Frameworks, tools, and solutions while also conducting manual testing activities.
- Collaborated with manual testers to transform manual test cases into automated scripts.
- Involved in generating weekly progress reports, PI Planning, and attending Scrum meetings.
- Engaged in the creation, execution, and upkeep of Test Plans, Test Scenarios, and Test Case Documents within JIRA, aligning with business requirements and carrying out testing in the designated test lab environment.
- Attending all the major Agile Ceremonies, including Sprint Planning, Retrospective, and Story Grooming meetings.
- Conducted result analysis and collaborated with developers to address bug-related issues.
- Performed Defect Tracking and Management in JIRA
- Wrote complex SQL queries to extract data from Oracle Database and performed data validation.

QA Analyst

Cognizant Technology | Teaneck, NJ | April 2017-Jun 2018

Responsibilities:

- Executed regression and functional testing across various stages of development.
- Identified and documented software defects using Jira.
- Validated backend database integrity through complex SQL queries.
- Analyzed and maintained Traceability Matrix (RTM) connecting Requirements and Test Cases.
- Reviewed the Software Requirements Specification documentation.
- Actively participated in the quality assurance process, adhering to Agile (Scrum) Test Methodology.
- Executed test cases and documented bugs while assigning appropriate classification and issue severity ratings.
- Collaborated with the team to perform requirement analysis, creating Test Strategies and Test Plans.
- Involved in Functional, Integration, Regression, System, and User Acceptance Testing (UAT) during the various phases of the application testing.
- Specialized in Integrated Eligibility (IE) systems and Health Insurance Exchange (HIX) platforms, ensuring seamless functionality, data accuracy, and compliance with regulatory standards.