

Thomas Louis

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SUMMARY

Dynamic and results-oriented Principal Quality Engineer with 14+ years of experience in full-stack test development, automation, and performance testing of large-scale, multi-tenant enterprise systems. Holder of Nanodegrees in AI Programming with Python and Cloud DevOps Engineering, bringing a forward-thinking approach to QA automation. Proven expertise in test automation frameworks utilising Selenium WebDriver, Appium, Cucumber. Specialised in Web services, REST/SOAP/XML and API/MicroService based testing using tools such as RestAssured, Postman, SoapUI. Strong background in Java, Python, Shell scripting, and integrating unit testing frameworks like JUnit and TestNG. Proficient in CI/CD tools like Azure DevOps, CircleCI, GoCD, Github Actions, Jenkins, and container orchestration with Docker and Kubernetes. Strong experience working with cloud platforms like AWS, Azure, and microservices architecture using Kafka for event-driven platforms. Expertise in driving the shift left using Agile and DevOps practices. Highly skilled in driving strategic test planning, defect triaging, and ensuring 90%+ test automation coverage. Award-winning quality advocate, excellent communicator and mentor dedicated to embedding quality practices across the entire software development lifecycle.

EXPERIENCE

Personal Development – Cloud Devops Engineer

Udacity Nanodegree on Cloud DevOps Engineer

April 2024 – September 2024, Online

- Completed Udacity Nanodegree in Cloud DevOps Engineering, gaining expertise in cloud infrastructure, CI/CD pipelines, and automation tools.
- Delivered a Capstone project by developing and deploying a fullstack application on AWS EKS using a GitHub Actions CI/CD pipeline..
- Deployed a fullstack application on AWS via Ansible workflows integrated with CircleCI CI/CD pipeline.
- Developed a Cryptocurrency Price Tracker using Python Flask (GitHub Link).
- Designed and built a pet marketplace web app with a React frontend, Python backend, and AWS deployment using Ansible, CloudFormation, Docker, and CircleCI (GitHub Link).
- Created a Purchasing Power Parity Calculator using ReactJS, NGINX, Flask, Firestore, and AWS EC2, automated with Ansible (GitHub Link).
- Deployed a machine learning model as a microservice on AWS infrastructure (GitHub Link).
- Mastered CI/CD pipeline tools such as CircleCI and implemented CloudFormation scripts for AWS infrastructure automation.
- Developed a JavaScript data validation library (GitHub Link).
- Configured Prometheus monitoring using Ansible for target hosts.

Career Break

August 2023 – March 2024, India

- Career Break to provide full-time care for a family member with a medical condition.

Personal Development – CyberSecurity

Security Analyst

July 2023 – August 2023, Online

- Initiated the Security Analyst Nanodegree program and completed 60% before deciding to discontinue, after assessing that the course content was not aligned with my professional goals.
- Completed Penetration Testing using Metasploit course.
- Completed Cisco CyberOps: Analyzing Hosts course.

Personal Development – Artificial Intelligence

Udacity Nanodegree on AI Programming with Python

February 2023 – July 2023, Online

- Gained hands-on experience in integrating deep learning models into applications, Python scripting, and leveraging libraries such as NumPy and Matplotlib for vector visualization, matrix multiplication, and essential calculus concepts like gradient descent and backpropagation.
- Completed a Capstone project involving the development and training of an image classifier using a flower image dataset to predict flower names (GitHub Link).
- Achieved Gatling Academy Certificate of Graduation for Module 3: Load Testing a RESTful API using Java.
- Completed Pluralsight courses: 1. Java EE 7 Fundamentals, 2. Java 11 Fundamentals: Collections, 3. Plotting Data with Pandas, 4. Foundations of PyTorch, 5. Expediting Deep Learning with Transfer Learning: PyTorch Playbook.

Career Break

July 2022 – February 2023, India

- Career Break to provide full-time care for a family member with a medical condition.

Senior Consultant – Test Automation

ASX via Ampion

August 2021 – June 2022, Sydney, AU

- Ensured quality of trade data feeds on a Kafka-based data pipeline, improving data accuracy by 95% and reducing processing latency by 40%.
- Created and maintained functional, integration, and performance tests, achieving 99% test coverage and reducing defect leakage by 75%.
- Managed and optimized the CI/CD pipeline, accelerating deployment cycles by 50% and reducing integration issues by 30%.
- Utilized Kafka for event streaming, processing over 1 million events per second with 99.99% reliability.
- Deployed applications using Docker and Kubernetes, improving resource utilization and reducing infrastructure costs by 25%.
- Developed a load generation utility via Spring Boot REST service, simulating up to 10,000 concurrent users for robust performance testing.
- Conducted performance testing using Gatling, resolving bottlenecks and improving system throughput by 70%.
- Orchestrated continuous integration and delivery with GoCD, reducing release cycles from weeks to days and significantly boosting team productivity.

Senior Software Engineer in Test

ING Australia

May 2017 – August 2021, Sydney, AU

- Recognized with multiple awards at ING for exceptional performance and adherence to the Orange Code (ING's internal values framework).
- Winner of the Secure Code Warrior tournament and CEO Award for improving customer experience by simplifying a complex operational workflow.
- Engineered an end-to-end automation framework using Puppeteer and NodeJS, reducing workflow testing time by 60% for Mortgages, Personal Loans, and Credit Cards.
- Developed and deployed a Spring Boot-based mock service on Docker, increasing testing efficiency by 35% and supporting microservices architecture.
- Created a Kafka automation framework for consumers and producers, improving message processing reliability by 75%, enhancing large-scale data processing, boosting transaction streaming speed to the fraud engine by 50% and improving system efficiency.
- Executed UI automation with Selenium on TFS/Azure, achieving 90% test coverage and reducing manual effort by 75%.
- Utilized Applttools for visual regression testing, reducing UI defects and enhancing user experience in production releases.
- Engineered a API automation framework using RestAssured and SoapUI & Groovy based automation framework, improving API testing efficiency by 50% and accelerating integration testing.
- Designed mobile automation frameworks with Appium and Perfecto, increasing mobile test coverage by 80% and ensuring cross-platform functionality.
- Delivered Apple Pay provisioning for ING customers, boosting digital banking adoption by 25%.

Senior Automation Engineer

Axe Group

February 2016 – May 2017, Sydney, AU

- Prepared and maintained a Cucumber-based Selenium automation suite, covering 95% of smoke and regression testing for insurance applications and claims systems, reducing manual testing efforts by 40%.
- Managed test environments, resolving 5 daily build and deployment issues with 98% efficiency, while running Soap UI regression tests to ensure 99.9% system uptime and smooth integration between AXE products and client systems.
- Conducted system testing activities, including planning, execution, and defect reporting, achieving 100% test coverage for new features and reducing resolution time by 30% through effective defect triaging and root cause analysis.
- Collaborated with stakeholders and cross-functional teams, providing daily updates and reports, leading to a 15% faster project completion, 20% faster issue resolution, and an 80% decrease in defects in final releases.
- Tracked and analyzed test metrics, driving continuous improvements that increased test coverage by 25%, while improving team productivity by 20% through active participation in daily stand-up meetings.

Software Engineer in Test

Barclays Bank

February 2012 – December 2015, Pune, India

- Won an iPhone as a prize for writing a white paper on "Performance and Functional Testing of Web Services using Apache JMeter".
- Spearheaded testing for RSA AA Multifactor Authentication and Google NFC Wallet, developing strategies that reduced testing cycle time by 30% and improved project timelines.
- Designed and maintained a Cucumber-JVM Selenium automation suite, automating 80% of regression tests for projects like Tsys TS2 Messaging Upgrade, boosting efficiency by 25%.
- Led API testing for WSO2 ESB Implementation and Monolithic to SOA Migration, validating RESTful and SOAP APIs, reducing API response issues by 20%.
- Optimized performance testing for Google NFC Wallet using Apache JMeter, increasing system capacity by 30% for concurrent users.
- Mentored a team of six, enhancing productivity by 15% through coaching on automation tools and best practices.

Associate Consultant

Capgemini

October 2008 – February 2012, Pune, India

- Winner of Capgemini FSGBU Excellence and Innovation and Capgemini Delivery Excellence awards.
- Multiple Star Awards for excellence in quality product delivery.
- Led end-to-end test management for 15+ bank card and 100+ retail card sites, ensuring 100% compliance with timelines and quality standards.

- Developed a HP Quick Test Pro (QTP v11) automation framework, reducing manual testing by 40% and improving efficiency across multiple project phases.
- Managed UAT testing across five phases, coordinating offshore and onsite teams to deliver high-quality software with zero delays.
- Designed and executed 3000+ test cases, identifying critical UAT defects, reducing post-release defects by 20%, and enhancing product quality.
- Conducted accessibility testing using JAWS, ensuring 100% ADA compliance with W3C standards for HTML, CSS, and visual accessibility.

EDUCATION

Electronics and Communications Engineering

Cochin University of Science and Technology • 2008

CERTIFICATIONS

Certificate Of Nanodegree Program – Cloud DevOps Engineer

2024

- AWS Cloud Fundamentals: Cloud autoscaling, VPC, Amazon RDS, Cloud load balancing, EC2, IAM, SNS, S3, AWS CLI, Elastic Beanstalk, CloudFormation, Lambda, DynamoDB Deploy Infrastructure as Code (IAC): AWS networking, CloudFormation, Cloud security, VPC, S3, Cloud load balancing Microservices at Scale using AWS and Kubernetes: Kubernetes, Serverless, CloudWatch, Lambda, Amazon ECR, CI/CD, Docker Build CI/CD Pipelines, Monitoring, and Logging: Logging, CI/CD, GitHub Actions, Deployment automation, Build automation

Certificate Of Nanodegree Program – AI Programming with Python

2023

- Hands-on training on how to incorporate deep learning models into everyday applications, Python scripting, usage of libraries like NumPy and matplotlib, Vector visualization, Matrix multiplication, Calculus Essentials like Gradient descent and Backpropagation.
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SKILLS

Programming Languages: Java, Python

Cloud Technologies: Amazon AWS, Microsoft Azure, Rackspace OpenStack

UI Test Automation: Selenium WebDriver (Java/TestNG, C#), Puppeteer (Node.js)

API Test Automation: RestAssured, Karate, SoapUI, Postman, Java HTTP Client

BDD Tools: Cucumber, SpecFlow

Event-Driven Platforms: Kafka

Source Control: Git

CI/CD Tools: Github Actions, CircleCI, GoCD, Jenkins, Azure DevOps (TFS)

Infrastructure Automation: Ansible, Terraform

IDEs: IntelliJ, Visual Studio, VS Code

Scripting Languages: Groovy, JavaScript, PowerShell

Unit Testing: TestNG, JUnit, Mockito

Security Penetration Testing: Metasploit, Kali Linux

Performance Testing: Apache JMeter, Gatling (Scala)

Databases: MS SQL Server, Oracle, Postgres

Agile Project Management: Jira, Rally, Azure DevOps (TFS)

Application Servers: Oracle WebLogic, Apache Tomcat, RedHat JBoss EAP

Containerisation: Docker, Kubernetes

Log Monitoring: Splunk, ELK Stack, Cloud Watch

Accessibility Testing: JAWS

Visual Testing: AppliTools

Core Banking Systems: Bancs, VisionPlus, TSYS TS2

Code Quality: SonarQube