

Aditya Jayanti

📍 Seattle, WA ✉ jssaditya09@gmail.com ☎ +1 425-961-3320 [in](#) Aditya-Linkedin [G](#) Aditya-Github [P](#) Aditya-Portfolio

EDUCATION

University of Washington

Master of Science in Computer Engineering

Washington, USA

Sep. 2023 – March 2025

National Institute of Technology Puducherry

Bachelor of Technology in Electrical and Electronics Engineering

India

Jul. 2018 – May. 2022

EXPERIENCE

Software Engineer & Testing Assistant

Jan. 2024 – March 2025

University of Washington

Washington

- Rebuilt the Integrated Services website using React, Python, HTML, and CSS, improving load times by 30 seconds and providing a faster user experience.
- Executed Machine learning evaluation for fault detection in power systems, leveraging Logistic Regression and SVM, leading to more accurate results for fault classification and detection.

Advanced Application Analyst

Oct. 2022 – Oct. 2023

Accenture

India

- Optimized the Java-based Spring Framework by refactoring and streamlining the application's core logic, including reducing unnecessary database queries, optimizing the use of caching mechanisms, and fine-tuning business logic processing.
- Integrated Hibernate with Spring to streamline database access and improve query execution speed by 40%, ensuring more efficient data retrieval.
- Improved unit test coverage from 30% to 70% through the use of JUnit and Mockito, enabling early detection of potential bugs and enhancing code reliability.
- Created automated CI/CD workflows using Docker, Kubernetes, and AWS services to ensure efficient deployment in containerized environments.

Research Intern

Jun. 2020 – Aug. 2020

NIT AP

India

- Developed a face mask detection system by using image processing and deep learning algorithms, achieving an accuracy of 97.3%.
- Utilized machine learning tools, including Scikit-learn, for data preprocessing and model training to ensure high accuracy in real-world testing.

PROJECTS

ETL Pipeline — *AWS Lambda, AWS S3, PostgreSQL*

- Designed and implemented an ETL pipeline to extract, transform, and load data using AWS Lambda and S3 storage services.
- Processed raw data, transforming it by calculating important metrics like gross margin and then storing the transformed data in Amazon Aurora PostgreSQL.

Student Directory — *Java, MySQL, ReactJS*

- Developed and deployed a web application to efficiently manage and track the details of over 3,000 students, utilizing Java technologies, MySQL for secure and efficient database management allowing for real-time data updates, user-friendly interface.
- Led the design and development of REST APIs for data management, ensuring secure access and efficient processing.

RESEARCH PUBLICATIONS

Fault Analysis on Multi-Terminal System Using Wavelet Morphing and Machine Learning — *International Journal of Engineering*

- Conducted in-depth analysis of wavelet morphing techniques integrated with machine learning algorithms, resulting in enhanced fault detection capabilities for power systems.
- Improved classification accuracy by 30% in multi-terminal power systems by integrating machine learning techniques to identify and categorize faults.

TECHNICAL SKILLS

Languages: Java, Python, C++, C#, Bash, .NET

Web Development: JavaScript, HTML, CSS, ReactJS, NodeJS

Databases: MySQL, PostgreSQL, MongoDB, Oracle

Technologies: AWS, Azure, Docker, Kubernetes, Jenkins, Selenium, CI/CD Pipelines, Git, Power Mockito, JUnit Testing

Machine Learning: TensorFlow, PyTorch, Scikit-learn, SVM, Neural networks, Decision Trees, Skewed Datasets

Concepts: Object-Oriented Programming, Cloud Computing, Design Thinking, Machine Learning, Distributed Systems

CERTIFICATIONS & ACHIEVEMENTS

AWS Academy Cloud Practitioner: Amazon Web Services

Generative AI: Microsoft Learning

Python, Java: HackerRank

Most Valuable Teammate (MVT) Award: Awarded for contributions to the Application Discovery Suite team at Accenture