

# ATHIRA NIRMAL

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## PROFESSIONAL EXPERIENCE

### ConsultAdd

Jun 2023 - Dec 2023

#### Software Developer

- Constructed an end-to-end **ETL** pipeline from **AWS S3** to **Snowflake Data Warehouse**, resulting in a 10% increase in data processing speed, executed over 1,000 **MySQL** database queries and python scripts to automatically checkout the code from **Git**
- Architected a serverless web application using **AWS Amplify** achieving a 50% reduction in page load time
- Streamlined user authentication and authorization by integrating Amazon Cognito user pool into the serverless web application
- Utilized distributed computing frameworks such as **Apache Spark** to manage large-scale data processing tasks, enhancing performance and resource utilization by 15%.

### IBM

Sep 2017 - Jul 2021

#### Software Developer (Client: Airbus)

- Integrated entire frontend/backend modules using **Python** with over 10,000 lines of code for the client Airbus
- Updated a **Tableau** dashboard that tracks user adoption of new features, resulting in a 25% increase in user adoption
- Engineered various ETL flows and data processing tasks using **Informatica PowerCenter**, with a total of 100TB of data processed
- Accomplished tasks such as reading data from external sources, merge data, perform data enrichment and load in to target data destinations while shaped DAGs to run the **Airflow**
- Generated a **Lambda** Deployment function which processed over 100,000 events per day, with an average latency of 10 milliseconds
- Directed a 6-member team while providing support to L2 team in troubleshooting and resolved over 500 issues

#### Associate Developer (Client: ANZ Bank)

- Experience in developing micro services in IIB using **ESQL** and **Java**, connecting different applications and system architecture
- Contributed with cross-functional teams to prioritize business requirements, resulting in a 15% increase in customer satisfaction
- Devised test scenarios for **smoke suit**, **regression suit** and performed **unit testing** using **RFHUtil** with a 95% pass rate
- Assisted in the Software Development Life Cycle, worked on **Agile** methodology, including 100+ code reviews

## TECHNICAL SKILLS

**Programming Languages:** Python, C/C++, Java, ESQL, Bash Script, JavaScript, Haskell, HTML, CSS

**Data Engineering Skills:** Airflow, PySpark, Kafka, Snowflake, Informatica PowerCenter, Tableau, Power BI

**Database: NoSQL:** MongoDB, MongoDB Atlas, Robo 3T **RDBMS:** SQL, MySQL, PL-SQL, Oracle, DBever, Redis, PostgreSQL

**Cloud Technologies & Version Control:** Docker, AWS, Azure, Git, GitHub, Bitbucket

**Software & Libraries:** Anaconda, PyCharm, IBM Integration Bus, WebSphere MQ, Linux/Unix, Selenium, Flask, JIRA, Jenkins

## EDUCATION

**Binghamton University, State University of New York, Thomas J. Watson College of Engineering**

**Binghamton, NY**

*Master of Science in Computer Science* | **GPA : 3.60/4.00**

May 2023

**University of Kerala**

**India, Kerala**

*Bachelor of Technology in Computer Science and Engineering* | **GPA: 3.5/4.0**

Aug 2018

## CERTIFICATIONS AND ACADEMIC PROJECTS

### Certifications

- AWS Cloud Technical Essentials by Coursera, SQL by HackerRank, Python for Data Science by IBM

### Data Science | ETL on YouTube trending video data using AWS Services

Aug 2023 - Sep 2023

- Employed AWS services to streamline the ingestion and transformation of Kaggle's Trending YouTube Video Statistics data, has achieved a 40% improvement in data processing time

### Application Development | [Automated Application filling](#)

Aug 2023 - Sep 2023

- Created an application that automates the process of filling out application forms, saving users an average of 30 minutes per form

### The Research Foundation, SUNY | Research Assistant

Jan 2022 - Nov 2022

- Designed a high-performance Type 2 hypervisor, VM migration, and 92% copy overhead reduction using lseek instead of memcopy

### Data Science | [Web Scraping - Election result prediction](#)

Aug 2022 - Oct 2022

- Scraped 778880 election-related posts from 4Chan API, conducted sentiment analysis, predicted the election results, and built a web-based UI with Redis caching, increasing the fetching speed by ~2x

### Database Systems | [Student Registration System](#)

Mar 2022 - May 2022

- Implemented a student registration system, optimized database performance by fine-tuning SQL queries and indexing strategies, reducing query execution time by 40%

## LEADERSHIP EXPERIENCE

**Graduate Student Organization (GSO) , Binghamton University**

**Binghamton, NY**

**President**

Jul 2022 - Jul 2023

- Led the organization with 3000+ members, acted as a liaison between the graduate students and the administration
- Collaborated among diverse student groups, committees, senate, and administrators to foster a stronger sense of community among graduate students, resulting in a 70% increase in students' engagement in social events