# Abhishek Biju Das

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#### Education

## University of Wisconsin-Madison

Madison, WI

Bachelor of Science in Computer Science and Data Science, Minor in Math

Major GPA: 4.0/4.0; Cumulative GPA: 3.95/4.0; Dean's List: 7/7 semesters

### Technical Skills

Python, Java, C, C++, R, React, JavaScript, HTML, CSS, Spring, Postgresql, Git, TensorFlow, Flask, MongoDB, Docker, Kubernetes, Jira, Confluence, AWS, Azure, GCP, Tableau, PowerBI, Snowflake, Spark, Numpy, Hadoop, Postman, Linux, Bash, Maven, Gradle, Web Services, RESTful APIs, CI/CD pipelines, Big Data Management, Data Warehousing, Agile methodologies, Machine learning.

## Experience

## Machine Learning Engineer

May 2024 - July 2024

Safe-Guard Products International

Atlanta, GA

- Built and deployed a fraud detection machine learning model in Snowflake, improving fraud detection accuracy by 17% and reducing manual review time by 35%.
- Streamlined onboarding with comprehensive documentation, cutting training time for new analyst hires by ~30%.
- Utilized Python and SQL to automate data preprocessing workflows, reducing processing time by 25%.

## **Machine Learning Researcher**

Feb 2024 - Present

Madison, WI

- UW-Madison College of Engineering
  - Undergraduate Researcher in the Machine Learning and Optimization Research Lab under the mentorship of Professor Grigoris Chrysos.
  - Pursuing project focused on implementing teacher-student architectures using the seminal polynomial neural network, MONet to train smaller, computationally efficient models to deliver comparable model accuracy.

### **Data Scientist**

May 2023 - August 2023

Dubai, UAE

Flydubai LLC

**Projects** 

- Created a predictive model for flight delays using Python, achieving 93% accuracy and reducing downtime related costs by 13%.
- Optimized large-scale SQL queries for 100,000-row datasets, improving query execution speed by up to 20%.
- Delivered a 20-page report on model deployment feasibility, incorporating both technical and financial analyses.

### **Software Developer**

May 2022 – July 2022

Datafortune Pvt Ltd

- Pune, India
- Designed and implemented RESTful APIs using Flask, improving system response times by 18%.
- Leveraged Docker for containerization, enabling consistent deployment across development, testing, and production environments.
- Reduced database latency by 15% through optimized SQL query structures and schema redesigns.

## Software Developer Intern The New Indian Express Ltd.

April 2020 – July 2020

Kochi, India

• Developed a Python-based NLP scraper, digitizing 20 years of archived articles and saving 15 hours per week.

- Enhanced search functionality by 10% using dimensionality reduction techniques and algorithm optimization.
- Conducted comprehensive end-to-end testing on developed algorithms, improving parsing accuracy by 10%.

#### Notable Certifications & Achievements

- Certifications for <u>AWS Machine Learning Specialty</u>; <u>SnowCore Pro</u>; <u>AWS Solutions Architect Associate</u>; <u>AWS CCP</u>;
- Reviewer for the <u>Workshop on Uncertainty in Foundation Models</u>, evaluating submissions on topics related to uncertainty quantification, robustness, and trustworthiness in large-scale AI models.

## Event Driven Fraud Detection @ Capital One

see Github for more

- Developed a real-time fraud detection system for Capital One using AWS Lambda, DynamoDB, SNS, and SQS, enabling the detection of suspicious transactions and user notifications via SMS.
- Created a user interface with React and Flask for users to confirm or deny fraudulent activity through automated SMS responses.
- Implemented an event-driven architecture to ensure scalability and real-time fraud detection, integrated with Capital One's backend systems.
- Leveraged Agile methodologies using Jira for sprint planning and project delivery, while deploying the system on AWS for scalability and performance.