## **PAJOBO ROY BAGATI**

BSc Computer Science Graduate & MSc Artificial Intelligence Student

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# **Profile Summary**

Dynamic AI specialist and software Tester with hands-on experience in designing and executing robust testing methodologies to ensure software quality and reliability. Holding a solid academic foundation, a BSc with Honors in Computer Science and an MSc in Artificial Intelligence. Passionate about harnessing AI and machine learning to optimize software development processes and enhance operational efficiency. Proven ability to conceptualize and deliver end-to-end software projects while collaborating effectively with cross-functional teams. Driven by a commitment to continuous learning, innovation, and creating impactful, data-driven solutions that meet and exceed industry standards.

#### **KEY SKILLS**

- 1. Programming Languages: Python (Strongest), Java, HTML5, CSS, JavaScript, PHP, MATLAB, C++
- 2. Artificial Intelligence & Machine Learning: Autonomous Systems & Planning (STRIPS, Finite Domain Representation, Planning in PDDL), Neural Networks (RNN, CNN), Generative Models, Reinforcement Learning, TensorFlow, Keras.
- **3. Data Analysis & BI Systems:** Regression, Classification, Clustering (AHC), PyTorch, pandas, numpy, Power BI, Tableau, Data Warehousing, Data Mining.
- **4. Web Development:** Full-stack web development, Django, Python Flasks.
- 5. Software Testing: Integration, Compatibility, Functional, Sanity, JMeter testing.
- 6. Version Control: Git, GitHub
- 7. Agile Methodologies & Project Management
- **8. IoT Systems:** Practical applications and understanding of Internet of Things.

## **WORK EXPERIENCE**

### **Trainee Software Tester (Internship)**

Hi Tech Plus, London | Sept 2022 – Mar 2023

- Designed and executed test scenarios for new software updates, ensuring product integrity and functionality.
- Collaborated with development teams to identify and resolve 60+ critical bugs, improving software stability by 15%.
- Produced detailed reports on testing outcomes, providing actionable feedback to enhance product performance.
- Implemented risk-based testing techniques to prioritize high-impact areas, contributing to the reduction of post-release defects.
- Executed various tests that included; unit tests, integrated testing, compatibility testing, integration testing functional testing, sanity testing, and jmeter testing.

### **Key Achievement:**

• Successfully identified critical vulnerabilities early in the development cycle, reducing the number of bugs in the final product by 20%.

# PROJECTS & PORTFOLIO (Available on my GitHub)

A collection of my AI, software development, and data analysis projects can be found on my GitHub and <u>personal website</u>. These projects showcase my work in machine learning, AI planning, software testing, and full-stack development, demonstrating my ability to design, implement, and analyse intelligent systems.

#### **Current Research:**

- "The City": Developing an 85-95% autonomous factory that leverages AI-driven automation, optimization, and decision-making to enhance industrial efficiency and sustainability.
- Al in Warfare: Investigating the application of artificial intelligence in military strategy to minimize casualties while maximizing operational effectiveness, focusing on ethical and precision-based AI interventions.

## **Education**

## **MSc Artificial Intelligence**

Royal Holloway University of London | 2023 – 2024

- **Relevant Modules**: Deep Learning, Autonomous Systems, Data Analysis, BI Systems, Ethics in Artificial Intelligence, Formal Verification.
- Project: Exploring Satisfiability Modulo Theories and Bounded Model Checking in AI Planning

## **BSC Computer Science with Honors**

Oxford Brookes University | 2018 – 2022

- Relevant Modules: Artificial Intelligence, Machine Learning, Game Development, DevOps, Databases, Internet of Things, Principles of Secure Operating Systems, Software Engineering, Advanced OOP, WebApp.
- **Final Year Project:** Predictive Modelling for malaria outbreaks using logistic regression and clustering techniques.

## **Achievements**

• **University Agile Project:** Successfully developed a mobile application focused on student well-being, aimed at addressing the growing mental health crisis among university students. Led the project from ideation to prototype stage, utilizing Agile methodologies.

### **Interests**

• Al research, Autonomous Systems, Neural Networks, Data Analysis, Ethical Al development.