Binson Sam Thomas

Data Science Graduate | AI/ML Engineer | PL/SQL Developer

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# PROFESSIONAL SUMMARY

Data Science and Analytics graduate (Distinction) with over 5 years of professional experience in data analysis, machine learning, and software development, including experience in pharmaceutical data analysis, aligning with PT&D processes and data sources. Demonstrated expertise in SQL, Python, Excel, and AI/ML concepts across healthcare and finance domains. Applied data analysis techniques to solve challenges in drug development. Known for delivering structured mentoring, communicating technical insights effectively, and fostering a data-driven culture. Passionate about shaping future data professionals through practical instruction and guidance. Experience fostering data-driven culture, generating actionable insights from data analysis, supporting strategic decision-making through data-driven insights, working closely with technical teams, interacting with the scientific community, translating data insights into actionable projects, and building strong collaborator relationships across teams. Promoting standard methodologies for data analysis and experience translating complex analytics into actionable projects.

CORE SKILLS

* Technical Skills: Python, SQL (PL/SQL, Oracle), PyTorch, TensorFlow, OpenCV, Excel, Pandas, Power BI, Spotfire, Machine Learning, Deep Learning, Feature Engineering, Data Visualisation, Git, CUDA
* Core Competencies: Data Analysis, Real-Time Systems, Retail Tech, ML Model Optimisation, Stakeholder Communication, Technical Mentoring, Agile, Curriculum Design, Research Collaboration, Data Mesh, Data Governance, Data Integration, Data Engineering, Curriculum Design focused on building data literacy

# PROFESSIONAL EXPERIENCE

University of Hertfordshire Hatfield, UK

Casual KTP Associate (Machine Learning Research) Oct 2023 – Aug 2024

* Designed a real-time fall detection system using 3D CNNs and OpenCV, processing 200GB of motion sensor & camera data.
* Developed a Two-Stream Convolutional Network in PyTorch, achieving 99% accuracy and reducing false negatives by 95%.
* Led feature engineering and performance benchmarking, boosting computational speed by 30%.
* Collaborated with academic teams and presented results in interdisciplinary research forums.

Asda Stores LtdHatfield, UK

Section Leader, General Merchandise (Part-Time) Apr 2023 – Present

* Lead and mentor the GM team, managing stock, layout planning, and modular changes.
* Improved floor strategy resulting in 5% sales uplift across seasonal categories.
* Recognised for operational efficiency and customer service leadership.

Tata Consultancy Services Mumbai, India

IT Analyst | PL/SQL Developer Dec 2017 – Sep 2022

* Led a high-performing team to achieve a 25% increase in productivity for the Risk Management System by optimizing queries and utilizing Oracle SQL Tuning Advisor.
* Engineered a custom Start of Day (SOD) dashboard, enhancing application capabilities and enabling real-time SOD status monitoring. This solution led to a 40% reduction in night support calls and improved operational efficiency.
* Played a pivotal role in the comprehensive back-end development of critical Regulatory (SEBI) changes within the Indian Capital Market for four consecutive years, ensuring the product remained at the forefront of market trends, showcasing adaptability and responsiveness to regulatory shifts.
* Improved processing speed by 30% and handled one million orders daily by integrating customer feedback and optimising SQL performance.
* Developed and delivered training sessions on SQL best practices and query tuning, promoting standard methodologies for junior analysts.

# EDUCATION

**University of Hertfordshire | Master of Data Science and Analytics (MSc)** Hatfield, UK

Grade: Distinction Sep 2022 – Feb 2024

* **Relevant Coursework:** Foundation of Data Science, Neural Networks and Machine Learning, Data Mining, Applied Data Science and Analytics

Cochin University of Science and Technology | Bachelor of Technology (B.Tech)Chengannur, India

CGPA: 7.73/10 Aug 2013 – May 2017

# SELECTED PROJECTS

Fall Detection System (MSc Thesis + KTP Collaboration)

* Built vision-based real-time fall detection with motion sensors and PyTorch models.
* Enhanced pipeline accuracy through preprocessing, feature tuning, and visualisation.

ATS Resume Optimiser – Resu\_prompt (Independent Project) - Ongoing

* Developed a full-stack AI-powered tool to tailor CVs to job descriptions for ATS compliance.
* Integrated Gemini AI for suggestions, preserved formatting, and implemented caching, chat history, and folder-based resume output.

NewTown Bill Splitter (Independent Project) - Ongoing

* Created a user-friendly app to split group expenses with custom sharing, balance tracking, and clear summaries.
* Integrated phone camera OCR to scan and analyse physical bills, enabling faster and more accurate expense entry.

# ADDITIONAL INFORMATION

Awards

* Star of the Quarter – TCS (Q2 2020, Q2 2022)
* Star of the Month – 3x recipient
* On-the-Spot Awards – 4 personal, 19 team awards

Languages

* Fluent in English, Malayalam and Hindi; Conversational Proficiency in Tamil.