Alexander Adu-Sarkodie

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Experience

With over 15 years of experience advancing software engineering, technical leadership, and people management, I bring a proven track record of delivering transformative digital solutions across various industries, including digital broadcasting, aerospace, defence, e-commerce, energy, GDS, global events, and academia.

As Head of Engineering, I am responsible for the overall technical and architectural direction and performance of the engineering teams within an Agile cross-functional setup. My hands-on expertise in distributed systems and Microservices guides architectural decisions, ensuring scalability and reliability. Additionally, I am involved in coaching and mentoring engineers, collaborating with various teams, and ensuring alignment with organisational strategies.

I bridge technical and business priorities by collaborating with Product, DevOps, and Architecture teams, proactively managing risks, and recruiting top talent while staying ahead of industry trends to maintain competitive advantage and drive OKR. Other key responsibilities include fostering a culture of innovation and driving continuous improvement in engineering processes.

My work on pioneering platforms like the BBC iPlayer, Repair Smart (predictive maintenance with BAE Systems/Airbus) and StrikeNet (Digital Twin for UK MoD) demonstrates my ability to architect complex, high-impact systems that drive operational efficiency. As Head of Engineering for the FIFA World Cup 2022, I ensured the resilience of the mission-critical platform for global audiences. My roles at GDS/GCHQ, Marks & Spencer, and the BBC have honed my expertise in secure, scalable architectures and digital transformation.

Ranked among the UK's Top **50 Influential Technologists (2023)**, Alexander specialises in aligning engineering excellence with business outcomes through cloud-native systems, AI/ML, and enterprise software. My leadership has spanned global teams across 10+ countries, bridging hands-on architecture with executive strategy. A builder of high-performing teams, Alexander drives agile transformation, mentoring, and operational optimisation, with expertise in applied AI (LLMs, RAG, autonomous agents). By integrating AI into design, simulation, testing, and maintenance, engineers are empowered to optimise processes, predict failures, and automate repetitive tasks, reducing costs and time-to-market. Across industries, I've implemented these solutions to automate complex processes, enhance decision-making, and deliver measurable efficiency gains - from intelligent customer service to enterprise knowledge management - see **SPYDER** (https://www.energytariffscheck.com/), which followed my work on **OFGEM's MHHR** project.

I oversee technical strategy for autonomous squads, facilitating risk assessments to accelerate decision-making and forecast resource needs to balance innovation with project constraints.

My MSc in Mechanical Engineering and automotive industry experience at Ford Motors further strengthen my systems-thinking approach to engineering challenges. This unique combination of technical depth, cross-industry expertise, and leadership acumen positions me to drive cutting-edge solutions while fostering engineering excellence at scale.

Portfolio: https://github.com/DataSolutionSoftware/Portfolio
GitHub: - https://github.com/kukuu?tab=repositories