

**Alexander Adu-Sarkodie**  
**CV**  
aadusarkodie1@gmail.com

## **Project portfolio**

- Nissan - <https://www.nissan.co.uk/>
- Home Office
  - Ministry of Defence - <https://www.gov.uk/government/organisations/ministry-of-defence>
  - Government Communication Headquarters (GCHQ) - <https://www.gchq.gov.uk/>
  - National Cyber Security Council (NCSC) - <https://www.ncsc.gov.uk/>
- Jaguar Land Rover - <http://www.jaguarlandrover.com/>
- Specsavers - <https://www.specsavers.com/>
- Sony PlayStation 2017 - <https://www.playstation.com/en-gb/>
- Flix Premiere (Online Cineplex) - <https://flixpremiere.com/>
- Marks & Spencer (Digital Transformation) - <https://www.marksandspencer.com/>
- Daily Mail Group (Wowcher) - <https://www.wowcher.co.uk/deals/london>
- BBC iPlayer - <http://www.bbc.co.uk/iplayer>
- BBC Mobile - <http://m.bbc.co.uk/>
- BBC Learning - <http://www.bbc.co.uk/learning/>
- BBC Weather - <http://www.bbc.co.uk/weather/>

## **Profile**

- LinkedIn - [www.linkedin.com/in/alexander-adu-sarkodie-063b4b4a](http://www.linkedin.com/in/alexander-adu-sarkodie-063b4b4a)
- GitHub <https://github.com/kukuu?tab=repositories>
- Training (Programming) - <https://www.citylit.ac.uk/courses/introduction-to-javascript>

## **Key Technologies**

- <https://github.com/kukuu/siliconlabs/blob/master/README.md>

## **Architecture**

- White Paper - <https://github.com/kukuu/AGILITY/tree/master/white-paper>

## **Scaffolding Blue Print**

- Tooling & Infrastructure - <https://github.com/kukuu/AGILITY/blob/master/README-scaffolding.md>

## **Digital Transformation**

- Agile & Digital Transformation - <https://github.com/kukuu/AGILITY>

## Experience

Alexander is a Computer Systems Engineer, Digital Transformation Specialist, and an Academic with substantial years of industrial and academic experience. He has many years of experience working in multiple industries in software engineering.

As a Digital Software Engineering Technologist, Alexander drives end to end software for initiatives, guiding, supporting release plans and transformation programmes for the Government, Public Organisations, Private sector including Technology, eCommerce, Media & Broadcasting, Banking, Hospitality, Education, Energy and Financial sectors.

A Full stack result oriented engineering leader, with extensive hands on experience in end to end software life cycle development. Worked in various Engineering roles. Namely; Software Engineer, Senior Software Engineer, Tech Lead, Software Development Manager, Head of UI Engineering, Technical Architect, and Head of Development & Graduate Academy.

He is also a part-time Visiting Lecturer in Business Computing and Digital Transformation.

A Developer and engineer at heart he loves turning difficult problems into elegant and simple solutions and to this end likes to input into, add value to the technology and solutions his teams design, build, support, while empowering them with lean Agile principles, as a Servant Leader. Ensuring they are empowered, autonomous, and self organising cross functional teams. He is a collaborative, team player and likes to lead by example.

Alexander adopts Design Thinking approach during discovery as a non-linear, iterative process enabling him to seek, understand users, challenge assumptions, re-define problems, and help with developing innovative solutions to prototype and test.

One of Alexander's achievements in the past was helping with the digital transformation of Marks & Spencer's online eCommerce platform from a disparate monolithic one to an omni-channel, and contributing to developing its mobile iPad platform. Personally, building the POC for its checkout branding.

He also built user experience features for its online Loyalty Services, put in place cross functional high performance software engineering in-house teams for Marks & Spencer's eCommerce online platform in the UK and in New Delhi, where he had responsibilities in addition. At Marks & Spencer, he helped to employ 47 Engineers in the business. Architecting Continuous Integration, Delivery and Deployment. Helping in the formation of the DevOps, CI pipelines, Agile Product teams, and The Graduate Academy.

Alexander worked on the BBC News Interactive Platform, the iPlayer and on the first British Broadcasting Corporation Mobile platform while at the Corporation. He initially built the **"Send to a friend"** module for the application when it was first released.

Knowledge Sharing, Strategic thinking, Scalability, Performance Management, Code Reviews, People Management, Budgeting, Project planning, estimation and execution, Cyber Security and data protection (GDPR) are areas he pays attention to in any Software Development Life Cycle, which are at the heart of the product features he heads to build. His duties also includes client facing and stakeholder management, setting up KPIs and other metrics for the engineering teams, and also reporting to technical management and directorship at CxO levels. Alexander's position also revolves around working with suppliers both home and abroad.

He embraces being hands on or hands off his duties. Always keen to roll up sleeves if required. Leading by example. In his spare time, he contributes to the open source community, and runs hands-on computer programming, and Digital Transformation workshops in selected Institutes of Higher Education across London. Part of the government's innovations EdTech Program.

## Career History

### December 2019 - to date

***Principal Software Development Engineer - Nissan Europe: Contract  
Paddington - London***

#### **Responsibilities:**

Built the Optical Character Recognition (OCR) module for NISSAN auto's new computer on-board-ing systems for its Web and Mobile App. Supporting the Product, UX, UI Design, Analytics, and API teams with valuable outcomes for its consumers and customers. The technical teams are globally distributed in UK, US, Japan, Romania, Argentina and India.

- Delivering quality software, and features for its Mobile platforms.
- Articulating solutions, working with clients to ensure products and services are delivered in the right way.
- Providing Technical Leadership (near and off shore), strategic planning, architectural direction, development initiatives for project execution, timeframes for review and releases,
- Capacity planning - Leading SPRINT Planning, estimation and responsible for enforcing code reviews, establishing best practices, helping to make the right technology choices, and taking responsibility for the code base and builds.
- Ensuring provision of credible and scalable development platforms : Supports, Automation, Reproducible, Elastic, Smooth, Traceable, CI/CD, Automated Testing, Quality Assurance, and use of best practices, and Lean Agile principles in the Software Development Life Cycle.
- Supporting multiple cross functional Agile teams in the BAU projects for clients.
- Guiding and supporting Release plans and Discovery phases.
- Ensuring deadlines are met in line with business goals with time scopes and budget
- Maintain technical debt backlogs and ensure that they are continuously progressed.
- Stakeholder Management

#### **Technologies**

- NodeJS, Express
- JavaScript, REACT, REACT Native, iOS, Android, Isomorphic JavaScript
- REDUX
- Object Oriented Programming
- GraphQL
- Storybook
- AEM
- Apigee API Architecture
- PACE
- Webservices (REST), Messaging, Websocket
- APIs, PostMan, Swagger, Curl, Authentication & Access Control (JWT),
- TDD, XP, BDD
- Automation, CI/CD, Jest, Enzyme, Mocha, Chai, Gulp
- Containerisation (Docker/Kubernetes)
- Style Components (CSS-in-JS), PostCSS, SASS, LESS,
- Responsive Design, Mobile First, Cross Browser Compatibility, PWA

- HTML5, CSS3, Media Queries
- Databases - MySQL, NoSQL (MongoDB), Excel, CSV
- Node, Apache platforms, Unix, Lynx
- Architecture- AWS, SOA, Micro-services, Architecting for High Availability
- Zeplin / Miro
- JIRA/Confluence

**September 2018 - November 2019**

**Head of Development - Zaizi : Contract**

**Clients: Home Office, GCHQ, National Cybersecurity Council.**

### **Responsibilities:**

Working as a Full stack engineer, my responsibilities included a balance of the following:

- Hands on development, articulating solutions, working with stakeholders to ensure products and services are delivered in the right way. His role was a hands-on CTO, which spun across Technical Leadership, Code Writing, Architecture and People Management.
- Line Management (near and off shore), providing strategic planning, development initiatives for project execution, timeframes for review, releases, and driving best practices.
- Leading cross functional Agile teams in the DevOps area.
- Guiding and supporting Release plans and Discovery phases with internal and external stakeholders
- Maintain technical debt backlogs and ensure that they are continuously progressed.
- Capacity planning - Leading SPRINT Planning, estimation and responsible for enforcing code reviews, establishing best practices, helping to make the right technology choices, and taking responsibility for the code base and builds.
- Ensuring provision of credible and scalable development platforms : Supports, Automation, Reproducible, Elastic, Smooth, Traceable, CI/CD, Automated Testing, Quality Assurance, and Lean Agile principles in the Software Development Life Cycle.
- Reporting on key delivery metrics including project progress and resource usage to business.
- Meeting deadlines with scope, budget, maximising efficiency and managing relationships and performance of the Software Engineering teams.
- Managing product backlog items (PBLi), Agile process and technical resources within project schedule, and working closely with Product Owner and Delivery Lead to gather and prioritise functional and non-functional requirements.
- Keeping abreast with trends in changing technologies landscape to refine the engineering teams, governance and making decisions for business to achieve its goal and becoming competitive.
- Responsible for assigning engineers to teams, Hiring, Training & Development. Career counselling managing expectations, 1-2-1, appraisals, mentoring and coaching Software Engineers. Managing expectations, setting KPIs for the engineering teams.
- Working with vendors, contractors and third parties to supply required resources for projects
- Ensure Service Level Agreements, contractual agreements, privacy and policies are not violated or compromised by the development teams.
- Working with Platform and Release Management teams to ensure completion of process life cycle and delivery of product, lead trouble shooting sessions, and engage with customer concerns, and after care support.
- Working closely with UX and Product Owners to define user journeys, interface features and also algorithms for designs, and wireframes. Ensuring designs are extensible and comply with standards and follow principles of KISS. Mobile first. Build prototypes. Engage AB/MVT.
- Ensuring technical documentation are constantly reviewed to support development and training, on-boarding new Engineers.

## Technologies

- NodeJS, Express
- JavaScript, JavaScript Frameworks, Isomorphic JavaScript, REACT, REDUX, Storybook, GatsbyJS,
- GraphQL
- Webpack
- Object Oriented Programming
- Webservices (REST), Messaging, Websocket
- APIs, PostMan, Curl, Authentication & Access Control (JWT),
- TDD, XP, BDD
- Automation, CI/CD, Jest, Enzyme, Mocha, Chai, Gulp
- Containerisation (Docker/Kubernetes)
- SASS, Style Components (CSS-in-JS), PostCSS,
- HTML5, CSS3, Media Queries, PDF2Html
- Enterprise CMS - Crafter (Headless CMS), DRUPAL
- Databases - MySQL, NoSQL (MongoDB), Excel, CSV
- Node, Apache platforms, Unix, Lynx
- Architecture- AWS, SOA, Micro-services, Event Driven/Composition, Architecting for High Availability
- Responsive Design, Mobile First, Cross Browser Compatibility, offline support (PWA/Service Workers)
- Zeplin
- JIRA/Confluence

## JAN. 1999 - to date:

**Visiting Lecturer – Business Computing - The City Literary Institute (<http://www.citylit.ac.uk/>)**

Subject Area: JavaScript and JavaScript Frameworks

Coverage

- Programming & Emerging Technologies
- Digital Transformation & Best Practices

**November 2017 – August 2018**  
**Keytree: Contract**

***UI Development Lead - Managed Services***

Keytree is a specialist technology innovation group.

Technologies & Platform: OOJS, REACT, REDUX, NodeJS, RESTful API, AngularJS, Charts, Web-Socket, Socket.io, JWT, 2 Factor Authentication, AXIOS, MongoDB, GraphQL, ApacheMQ, Apache, BASIS, ABAP, Micro-services, SOA, Team City, CI,CD, Docker, AWS. SAP HANA.

**Responsibilities**

- Technical Leadership, Architectural direction, end to end software development.
- Leading SPRINT Planning, estimation and responsible for code reviews, establishing best practices and taking responsibility for the code base and builds.
- Managing Relationships with stakeholders(Jaguar Land Rove, GLA, Vodaphone, Freshfields), and Performance of the Software Engineering team. Including offshore.
- Managing product backlog, Agile process and technical resources within project schedule. Working closely with Product Owner and Delivery Lead to gather and prioritise functional and non-functional requirements.
- Driving best practice, ensuring Training & Development of the Software Engineering Team
- Ensuring provision of credible development platforms, CI, Automated Testing, Quality Assurance, Build processes & Architecture, Tools for the teams and use of Best Practices in Agile development and Software Development Life Cycle (SDLC).
- Reporting on key delivery metrics including project progress and resource usage to business, and external stakeholders.
- Managing expectations, mentoring and coaching Software Engineers.

**October 2015 – November 2017: Freelance**

**Full stack**

Developing and supporting digital transformation programmes, digital initiatives and service for the GDS,IT, eCommerce, Banking, Media, Education, Wellbeing and Broadcasting.

- SONY
- Ericsson
- Flix Premiere
- Testenium

**Technologies** - <https://github.com/kukuu/siliconlabs/blob/master/README.md>

**August 2012 – September 2014**  
**Marks and Spencer : Tech Lead**

- Led the digital transformation programme for the Online Shopping division
- Chief architect in delivering new online omni-channel operating transactional platform FEAR (Angula & JAVA) for business
- Built the iPad Responsive Web application
- Built the new platform wide navigation module for online transaction
- Driving best practice,
- Set up Graduate Academy
- Keeping abreast of new technologies, and refine team.

**August 2014 – September 2015**  
**Marks and Spencer : Software Engineering Development Manager**

**Responsibilities:**

Delivered the technical framework, and initiative for the digital transformation of Marks and Spencer from a coupled monolithic to a scalable omni-channel platform while ensuring the continuation and enhancements of services.

As member of the Strategic Leadership Technical Team at Marks and Spencer's e-commerce platform my responsibilities included:

- Lead Developer iPad, omni-channel , Checkout and Loyalty schemes platforms
- Technical leadership across multiple Agile cross functional teams. Hands on development.
- Managing relationships across project teams within the business portfolios.
- Managing Performance of the Software Engineering team. Including offshore.
- Responsible for ensuring on boarding, Training & Development of the Software Engineering Team.
- Serving as Agile Coach, Advisor and continuously aligning team to business mission.
- Ensuring provision of credible development platforms, Automated Testing, Quality Assurance, Build processes & Architecture, Tools for the teams and use of Best Practices in Agile/Water-fall development and Software Development Life Cycle (SDLC).
- Reporting on key delivery metrics including project progress and resource usage to business. Working with Platform and Release Management teams to ensure completion of process life cycle and delivery of product and engage with customer concerns.
- Working with offshore and third parties to supply development and content resources for M&S.com
- Career counselling managing expectations, 1-2-1, appraisals, mentoring and coaching Software Engineers.
- Developing technical electronic assessment materials for hiring engineers
- Managing technical resources within project schedule. Gather and prioritise functional requirements from across the business, and maintain a prioritised backlog of features.
- Working closely with UX and Product Owners to define user journeys, interface features and also algorithms. Ownership of tasks, manage backlogs, code quality and assist QA group in evaluating tasks.
- Responding to customer feedbacks by working with Product Owners and UX team to estimate, build prototypes from design ideas to drive conversion and AB/MVT

Technologies, and Development Practices: JavaScript, JavaScript OOP, AngularJS, NodeJS, GULP/GRUNT, Cordova, MySQL, WCS, AEM, XAMPP, BackboneJS, jQuery & jQuery Mobile, PHP, OOPHP (PHP5), BDD, TDD, HTML, HTML5, Bootstrap, Jenkins, GIT, CSS3, LESS, SASS, Responsive Design & Mobile Design, Lean Agile Development, Continuous Development, Continuous Integration.

**January 2000 – July 2012**

**British Broadcasting Company (BBC) - White City H/Q, London**

Positions held:

- Senior Software Engineer
- Client Side Developer
- Interactive Developer

Projects:

News - BBC Mobile Platform: <http://m.bbc.co.uk/news>

Learning – The National Curriculum, Great Britain: <http://www.bbc.co.uk/schoolradio/>

iPlayer – <http://www.bbc.co.uk/iplayer>

BBC News Interactive - Hull Centre , Broadband Interactive TV Platform

Responsibilities, Technologies and Platforms

- Working as a Developer my roles involved translating functional and design specifications into consistent and high quality web based interface using open source complex, resilient, robust, re-usable, and light-weight well-structured semantic HTML applications for Factual, News, Sports, Learning, Entertainment, Drama & Arts ,Third Party integration applications against RESTful web services for Web, Mobile and InteractiveSmart TV platforms. Using a variety of client and server side technologies to enable a better user experience.
- Assist Production Staff on technical issues, and suggest alternative ways of doing things.
- Adopting and promoting best practice methodologies. Both usability and performance.
- Working with Stakeholders to collect, understand, organise and document business requirements (functional and non-functional) for products, projects and features.
- Maintaining production deadlines and presenting completed work to internal stakeholders
- Keeping abreast of new technologies and improving internal systems.
- Programming Languages & Technologies: iPlayer, MVC Framework (PHP5 – Zend Framework), PHP, HTML, XHTML, HTML5, CSS2/CSS3 & Media Queries, LESS, Responsive Design, OO JavaScript, Native JavaScript, AMD, Flash Embed, BDD, TDD, AGILE, JQuery, JQuery Mobile, Lazy Load Techniques, AJAX, JSON, RSS, XSLT, iPlayer, XAMPP, SEO Techniques, Photoshop, W3C Standards, XAMPP, AKAMAI, Windows, Apache, QUNIT, SVN, GIT, Tortoise, Eclipse, JIRA, TRAC, Confluence. AGILE, Continuous Integration.



## Projects Overview

### ***GCHQ, NCSC, BAE, The Home Office***

Technical Lead and Architect in driving end to end software for Government, Public Organisations, in digital initiatives and transformation programmes including cybersecurity for both home and overseas.

The platform serves as an advice centre, and provides personalised feeds, and recommendation engines for unified source of Advice, Guidance and Support on Cyber Security, including the management of Cyber Security incidents.

Stakeholders for the platform Include: Government Communication Headquarters (GCHQ), National Cyber Security Council (NCSC), British Aerospace Systems (BAE), The Home Office and Border Controls.

### ***Jaguar Land Rover, Vodafone, Freshfields, GLA***

Led the Development, QA and Platform Teams in the Managed Service Area in full lifecycle development and support of innovative, creative and fully-customised solutions, and digital transformation projects for commercial customers. Transitioning application support of the eCommerce Enterprise Platform portal for Jaguar Land Rover, Vodafone, GLA and Freshfields.

### ***Insight***

Led the Technical Development team that built Ernest & Young's Statistical insight Market Reporting Software. The application's Search Engine queries large datasets about various companies operating in different market sectors, providing insight and warnings about potential disruptors in their market.

### ***Kingfisher***

Alexander led the Agile software development in the alpha implementation of its next generation of IT Network Security management tools for Secgate. The Kingfisher is an API that provides integrated solution for reporting and management of transactional services by Banks and Venture Capitalists. Features of the software include, Controlled Dashboards, Charts, Heat Maps, Chat Bots, Filters, Search, Live data update and video chat services.

Secondly, Kingfisher helps clients analyse, correlate, identify and eliminate Cyber Security threats. The software tracks process and transactional activities in real time, including current data related to performance, awareness, breaches, compliance and safe governance using GDPR and other security legislations. Serving as an enterprise immune systems to improve the longevity of its clients cyber security strategies. Alexander led the development of the product, while managing and building the European team (UK and Austria) as part of its corporate vision.

### ***SONY PlayStation***

Senior UI Development Consultant on the next generation of SONY PlayStation Platforms for Europe, United States and JA (Japan & Asia). A back office Web Application that stores, filters, monitors and smartly reviews concepts and proposal roadmaps for its games development and marketing trends in real times.

### ***Marksandspencer.com***

Led the digital transformation of [marksandspencer.com](https://marksandspencer.com) as Tech Lead, and then later as Software Engineering Development Manager.

## **BBC**

At the BBC, Alexander worked in Future Media developing application software and cross platform systems for Mobile, Web and Smart screen devices. Here, he helped:

- To develop applications for News Interactive at TV Centre. Working on the first Digital Interactive Platform for Hull City Centre with its acquired first broadband channel in 2006.
- Future Media Technologies - where he helped to build the first BBC Mobile Web Platform.
- Entertainment, BBC Innovation and at Vision - helping with prototyping the iPlayer. Having worked on the "Send to a Friend" module.
- Author of the validation toolkit **RobboWebbie** for webpages (August 2002) - Interactive Factual & Learning, British Broadcasting Corporation (iF&L - BBC), White City, London. This toolkit was used by the Webmaster Team at Interactive Factual & Learning (iF&L), and Future Media Technology (FM&T), British Broadcasting Corporation (BBC), White City - London. The application is a combination of ActiveX, JavaScript, Data-binding components and is used to filter data and check for W3C standards compliance, and Quality Assurance in web documents before delivery to the public domain. Extract from my MSc thesis. The release of this software was widely acclaimed by the Technical Team at the corporation with acknowledgement to Alexander.

This is what Stephen Elson, Technology Project Manager and Christopher Haddow, Webmaster Lead at Interactive Factual & Learning BBC White City had to say in communication to the BBC community on RobboWebbie whiles he was at the corporation:

*"In the past Alex has made valuable contributions to strategic and departmental projects such as RoboWebbie, User Tracking and CSS font sizing investigation. His skills in data binding and extraction have been used to good effect, especially in the Robowebbie project, he should continue to contribute his particular areas of expertise to projects such as these. Alex also has a very sound understanding of Toolbox scripts and their implementation, and he has demonstrated good team working principles in passing on this knowledge to his colleagues wherever possible."* - Stephen Elson, Technology Project Manager at Interactive Factual and Learning BBC White City, London

*"Robo Webmaster allows you to run a series of checks on a site. Please can you try it out for us:*

*[http://xxxxxxxxx/xxxxxxxxx/teams/webmasters/robo\\_site\\_test.xhtml](http://xxxxxxxxx/xxxxxxxxx/teams/webmasters/robo_site_test.xhtml)*

*At the moment it only runs on sites in dmdev and may not be able to cope with very large sites e.g. the whole of /history.*

*The results are displayed using activeX, courtesy of Alex, which allows you to sort by file-name or test and filter by test.*

*We'd be grateful for any feedback and if you think of any more tests, that would be useful, please add them to the spreadsheet..."* - Christopher Haddow, Webmaster Lead iF&L - BBC - 08 August 2002.

## **Ford**

At Ford Alex worked as Web Developer/Analyst in the Data Mining project that transformed the production line to a digital production environment, away from paper.

This is what John Cox, Plant Manager, Ford Motors Enfield, Middlesex London had to say while I worked there:

*"I had the pleasure of working with Alexander during his period here at Ford Motors in Enfield as an internship student. Alexander did an outstanding job in his assignment. He carefully planned out his strategy, investigated problem areas and communicated his actions effectively. He quickly became an integral part of our team very quickly and participated in other activities outside of his area of expertise to further enhance his time here."*

*The project Alexander completed has been successfully implemented. With his assistance, we successfully passed an external audit for ISO9000 certification and have established a new benchmark that other areas of our location globally will be following - John Cox, Plant Manager"*

## **Qualifications**

- MSc Telematics (Computer Systems Engineering, Data Communications and Network Engineering.) - School of Electrical & Electronic Communications, Dept. of Computer Science, Middlesex University, London.
- MSc Engineering - Belarus State University, Minsk.
- Diploma Russian Language - Minsk, CIS
- Teacher Training Certificate (Adult Education) - UK. The City Lit Institute - London.

## **Membership Professional Bodies**

- Member British Computer Society (MBCS - UK)
- Member Institute of Learning (MifL - UK)
- Associate Member Institute of Engineers (AMIEng - UK)

**Other** - Bi-lingual, fluent English, Russian and conversational French.