**CHAITANYA DUDDU**

**E-mail:**[**duddu870@gmail.com**](mailto:duddu870@gmail.com)**Mobile: +447438295181**

---------------------------------------------------------------------------------------------------------------------------------

**Summary:**

* 14 years of experience in developing projects working as Enterprise Security Architect with leading e-commerce company and available immediately.
* TOGAF certified, AWS solution architect certified, AWS certified Security, Google Cloud Professional Cloud Security Engineer, CISSP along with Sun Java certifications (SCJP &SCWCD).
* Experience in waterfall, agile and Kanban models.
* Experience on complete software development life cycle (SDLC) starting from collecting business specifications, user requirements, confirming the design decisions regarding data, process, interfaces, reviewing/audit the code and documenting.
* Highly adaptive to a team environment and proven ability to work in a fast-paced teaming environment with excellent communication skills.
* Good technical knowledge in cloud-based infrastructure (AWS/Azure/Google), cloud API management platforms (APIGEE), containers like Docker, Kubernetes along with release deployment and migration techniques using CI/CD practices like Jenkins and Bamboo.
* Worked with SME’s, product owners, Business Analysts, PMO, UX team and senior management in communicating the risks on time.
* Have retail, e-commerce and mobile application project delivery experience using micro services architecture.
* Experience with JIRA, Confluence and Rally management tools and used TDD and BDD approaches.
* Have good experience in Aviation/Airlines, Railways, Banking, Telecom, Travel/Transportation, automotive, e-commerce and loyalty management companies.
* Excellent understanding of common industry cyber security frameworks like NIST, ISO2700X series, PCI DSS, GLBA, EU Data Security, Privacy acts, FFIEC guidelines, HIPPA, SOC2, COBIT, ITIL, GDPR and CIS.

**Professional Experience:**

**Enterprise Security Architect (Cloud and web applications).**

**Project Name: John Lewis Partners (May 2019- till date)**

**Description:**

John Lewis and Wait-rose partners leading retail client is working on digital transformation. This project is to provide security risk assessments and solution design advice for a collection of digital transformation projects within primary online products.

**Roles and Responsibilities:**

* Create Security Operating Model for Info Sec, Tooling and SOC teams.
* Come up with list of security scanning tools in build pipeline.
* Work with different vendors to come up with tools and perform proof of concepts on these security scanning tools for SAST, IAST, DAST, RAST, MAST.
* Create RACI matrix for entire organization.
* Come up with different solutions for assessing third party vendors for John Lewis Partners and Waitrose Partners.
* Work with different agile projects for web application security design - NodeJS & React, Kotlin, marketing tagging and tracking, scaffolding, performance, eCommerce
* Cloud platform security by design - on GCP, AWS and including Kubernetes, Docker, NGINX, Apigee, Gitlab
* Security / vulnerability / compliance testing with Risk assessment.
* Review risks associated with each change and define security requirements to be met by each change, in order to manage risk.
* Define security solutions to requirements and provide assurance on implementation of security solutions.
* Assess SAP Business Objects migration from on premise to GCP cloud environment.

**Environments and Tools:**

GCP, AWS, Veracode, Helios, Qualys, Splunk, ZAP, Dependency Checker, SAP BO, OWASP, Forseti Security Scanner, GCP command security Centre.

**Cloud Security Architect**

**Project Name: Volkswagen Group UK (Jan 2019- April 2019)**

**Description:**

Volkswagen Group UK works with different brands like VW commercial vehicles, passenger vehicles, Seat Brand, Audi brand, Skoda. This project aim is to migrate Audi and Volkswagen Brand to Cloud and secure the application by using AWS cloud.

**Roles and Responsibilities:**

* Work closely with CISO and CIO to develop Cloud based business capability that utilizes secure cloud architecture principles and patterns.
* Work closely with third party vendors to develop cohesive security architecture framework and create technical security controls to detect and defend against attacks.
* Deal with container security including Docker and Kubernetes.
* Explain penetration testing issues in clear way to the appropriate internal governance forum and senior management teams.
* Review Change Proposals/RFCs and participate in Technical Advisory Board (TAB) meetings for security considerations and alignment with wider security strategy and architecture.
* Perform Security risk assessments for internal and third-party vendors from requirements till the time project moves to production.
* Develop technical controls with ISO 27001, NIST, GDPR, PCI DSS(AOC/ROC) controls to safeguard systems against highly motivated and well-funded threat vectors.
* Providing SME support to ensure the delivery of major programs, embedding full end to end processing within Data Loss Prevention, Insider Risk and wider endpoint protection (Anti-Virus, disk encryption, patching).
* Work with merchants and suppliers to ensure PCI compliance.
* Maintain security operating model (TOM) for entire program and maintain risk register.
* Track Key Risk indicators (KRIs) and act as central support between business and vendors.
* **Environment:** JIRA, Agile, Confluence, Imperva WAF, Fortify, Puppet, Bitbucket, GitHub, Active directory, QRadar, Splunk, Nessus, Kenna Security, Tenable IO and SE, Salesforce, GreyLog,Nginx cache,Docker,Kubernetes,Jahia,Adobe Experience Manager(AEM),Adobe dispatcher,Varnish cache,Maria DB,App dynamics,LDAP server,Active MQ,Apache HTTP server,Tomcat server,HA Proxy,MY SQL,Mongo DB.
* **AWS Security Stack:-**Control Tower, Landing Zone, Direct Connect, CloudFront, API Gateway,DynamoDB,EC2,GuardDuty,IAM,KMS,Lambda,Management console, RedShift, RDS,Aurora DB, SES, CloudTrail, CloudWatch, Organizations and Accounts,S3,VPC,Certificate Manager,Route53,Glue,Inspector,CodeBuild,SNS,SQS,WAF and Shield, Kinesis, EKS, Glacier, EMR,Device Farm, Elastic Beanstalk, Systems Manager, KMS CMK, Cloud HSM,Scout2,Prowler,Inspec,Security Monkey.

**Lead Cyber Security Risk Architect**

**Project Name: HSBC Cyber Security CSMIP Dev-ops Risk Transformation (Jan 2018-Dec 2018)**

**Description:**

This project aims to make entire HSBC 50,000 development team resources to follow security standards, understand vulnerabilities in code while pushing code to production, identity access management, data security, change and release management, security testing automation and training of resources to follow HSBC security standards and also come up with security policies for different cloud environments-AWS,Azure and Google Cloud.

**Roles and Responsibilities:**

* Solutions - Provide technical, consultative, and delivery services to customers for DevOps initiatives. partnering the Professional Services team to develop offerings including proven architectures, proofs of concept, and best practices for delivery.
* Expertise - Collaborate with field sales, pre-sales, training and support teams to help partners and customers learn and use Devops services in key market verticals & regulated industries such as financial services
* Delivery - Engagements will include migration of existing applications and development of new applications. Provide technical, consultative, and delivery services in house for DevOps initiatives.
* Insights - Work with engineering, support and business teams, partner and gauge feedback as input to develop and design technology roadmaps
* Provides solutions to complex business problems for area(s) of responsibility where analysis of situations requires an in-depth knowledge of organizational objectives.
* Assess IT risk and come up with risk control assessments and create an application for developers to finish the assessment and come with cyber risk maturity score for entire HSBC.
* Responsible dealing with team of analysts, developers, testers or engineers and drive delivery of the project (Delivery/Maintenance/Testing) including asset creation, enterprise strategy definition, and contribution.
* Evaluate requirements against Apigee cloud hosted API platform functionality such as developer portal, traffic management, policies and caching.
* Integrate Apigee with external applications such as App Dynamics, continuous integration and continuous delivery, customization capabilities and RAML(MuleSoft) to OAS(Apigee) migration strategies.
* Install Apigee as per Apigee provided architecture and check gateway performance, security integration.
* Have good understanding of OWASP 10 and SANS25.
* Excellent understanding of common industry cyber security frameworks like NIST, ISO2700X series, PCI DSS, GLBA, EU Data Security, Privacy acts, FFIEC guidelines, HIPPA, SOC2, COBIT, ITIL, GDPR, SABSA, ASVS and CIS.
* Usage of Cloud Access Security Broker (CASB) between cloud service consumer and provider to combine and interject enterprise security policies like authentication, single sign on, authorization, credential mapping, device profiling, encryption, tokenization, logging, alerting and malware detection/prevention.
* Utilized all CASB utilities like Forward proxy, Reverse proxy, API Discovery and Log Discovery.
* Focus on using Sky high Shadow IT for detection of unsanctioned cloud services and proxy log inspection.
* Create security policies for cloud environments like AWS, Azure and Google Cloud.
* Worked with Fraud investigation team to migrate to Splunk to meet business expectations for an audit log consolidation and investigation solution.
* Worked with Splunk Enterprise, Search Head, Forward Layer, F5, Splunk Deployer, Splunk Master, Splunk indexers, Splunk Heavy Forwarder.
* Suggested alternatives to using Splunk and reduce costs to business by using open source tools like FluentD Data collector, Elastic Search and Kibana Web UI.
* Performed proof of concept for Kenna Security and Archer GRC to consolidate vulnerability data from various scanning sources like Appscan, Contrast Fastnesses.

**Environment:** JIRA, Agile, Angular JS, Node JS, Express JS, JavaScript, Python, MongoDB, Cucumber, BDD, Jasmine ,MYSQL, Docker, Tomcat,Jenkins,GIT,CheckMarx,AppScan,Contrast,IAM,APIGEE,ForgeRock OpenAM,SAST,DAST,IAST,Jenkins,Ansible,Bitbucket,Github,Nexus,Active directory, Windows servers ,PAAS, QRadar, Splunk, Datadog, Vault, Nessus, Kenna Security,Acher,Comet,SAMLv2,OIDC ,OAuth2,RBC/ABAC, Veracode, micro services 12-factor,Neu Vector, OKTA, Imperva WAF, Tenable IO and SE, Salesforce,

**AWS Security Stack:-**Direct Connect, CloudFront, API Gateway,DynamoDB,EC2,GuardDuty,IAM,KMS,Lambda,Management console, RedShift, RDS, SES, CloudTrail, CloudWatch, Organizations and Accounts,S3,VPC,Certificate Manager,Route53,Glue,Inspector,CodeBuild,SNS,SQS,WAF and Shield, Kinesis, EKS, Glacier, EMR,Device Farm, Elastic Beanstalk, Systems Manager, KMS CMK, Cloud HSM.

**Azure Security Stack**: -Azure active directory,AD,ADFS,RBAC,O365, Load Balancer, VM, Storages Database Management, Key Vault, Application Gateway, Redis Cache, Service Bus, Security Centre, Key vault standard software key, KV Premium HSM key, Dedicated HSM, Ad Connect, Site Recovery, API Management, Azure Security Centre, AZURE SQL, Stride threat modeling, Multi factor authentication, OWASP Dependency check, Zed attack proxy, AzSDK, AzSK ARM,SVTs.

**GCP Security Stack:** Cloud Armor, VPC networks organization, Cloud KMS, Compute Engine, IAM, Big query, Kubernetes engine, Cloud storage, Cloud HSM, KMS CMEK software key, Forseti, Security command center.

**Cloud Security Architect**

**Project Name: AIMIA Insights Platform (Sep 2016-Dec 2017)**

**Description:**

This project is developed for creation of reports based on existing customer data. We created a web application out of existing thick client Swing application using Angular Js, Node JS and Java/J2EE technologies. We developed this application using web servers, Tomcat application server, Message Queue, Apache Solr search, MySQL, Pentaho and Kognitio. We get customer data from clients on regular basis which are fed to Pentaho which in turn inserts the records in Kognitio DWH.Apache Solr search runs every day at time, picks up the hierarchies and updates MYSQL DB.

**Roles and Responsibilities:**

* Assessed existing complex solution and recommended appropriate technical architecture to transform the application to cloud environment.
* Advised and helped in building micro service architecture using tomcat.
* Lead developers and if needed got involved in hands-on coding/development of the project.
* Created Nonfunctional requirements and ensured to meet all NFR's on time.
* Recommended and helped to implement modern software development Devops CI/CD practices.
* Docker-ised tomcat and MYSQL for development.
* Came up with full architecture using high availability and disaster recovery.
* Recommended tools to implement monitoring using New relic, Nagios, Munin and Java melody.
* Worked closely with data warehouse company Kognitio.
* Helped in budgeting of servers and scaling of AWS servers and MYSQL.
* Implemented single sign on using WSO2.
* Came up with new set of tools based on necessity like use of Solr for caching data and load balancing of Solr using zookeepers.
* Maintained technology road map and kept on updating technical related issues using Confluence.
* Helped team to implement with latest security standards and acted as main point of contact with security testing team.
* Performed Monitoring, audit trial and alarming with CloudWatch, Cloud Trial and SNS.
* Maintained configuration history on AWS Config.
* Managed logs with ELK and Splunk.
* Used direct connect, VPC and hardened AMI.
* Used AWS KMS for encryption and used S3 bucket policies and EBS encryption.
* Handled IAM, detective control, Infrastructure protection, Data protection and application security.
* Secured EC2 instances with Qualys for vulnerability scanning and compliance and hosted in Dev, test, stage and Prod environments.

**Environment:**Agile (JIRA) Spring, Hibernate, JIRA, Agile, Angular JS, Node JS, WSO2,Apache Solr,Kognitio,MySQL,ActiveMQ,Swing,Cucumber,BDD,Jasmine,AWS,EC2,Lambda,S3,MYSQL RDS, Docker, Tomcat, Kubernetes, Terraform, Puppet, Chef, Python, Zoo keeper, Pentaho, Active MQ, Nagios, Munin, Java Melody, Service Now, New Relic,Qualys.

**DCWW Welsh Water**

**Azure security architect**

**Project Name: DCWW Azure website migration (Sep 2015-Sep 2016)**

**Description:**

**Dŵr Cymru Welsh Water (DCWW)** is a not-for-profit company which supplies drinking water and wastewater services to most of Wales and parts of western England. This project is to migrate application from on premise server to Azure cloud and build security and protect website from vulnerabilities.

**Roles and responsibilities:**

* Design and implement the Cloud Governance Framework including the cloud policies and guidance, involving the proper teams as legal, internal controls and compliance, IT governance, IT security and others
* Perform Data Security (Data protection, Encryption, Data a rest, Data in transit, Privacy)
* Conducts Information Security Risk Assessments on new business applications, IT changes, and group projects, identifies residual risk and recommends appropriate mitigating action.
* Ensures security reviews are conducted on relevant 3rd parties and recommends appropriate mitigating action.
* Identity and access management: Designs and maintains effective processes for the governance of access control using Azure AD.
* Use Azure Security Centre, Azure WAF, Key Vault, Azure Monitor, Azure Disk Encryption, KEK, HSM, Azure Sentinel (SIEM, SOAR), Azure Policy, MFA and protect from DDoS attacks using Protection Basic and standard service offerings.
* Monitor systems using Azure AD identity protection which flags current risks on dashboard.
* Manage core network functions like ExpressRoute, Virtual network, subnet provisioning and IP addressing.

**BNSF Railways**

**Lead Solution Architect**

**Project Name: Condition Based Maintenance (June 2013-Sep 2015)**

**Description:**

This project is developed to maintain existing sensors on cargo trains. It reads data from different sensors and notifies the system about defects in trains based on certain rules.

It can be like a hot wheel, malfunctioning bearing, wheel alignment, missing cabins etc...

**Roles and Responsibilities:**

* Created HLD and LLD documents and handled functional and non-functional requirements.
* Analyzed risks in the project and communicated with senior management.
* Took part in CAB meetings and prioritized change requests.
* Took part in hiring technical resources to the team.
* Ensured all SLA’s are met as part of releases.
* Provided guidance on server storage requirements, Networking and security.
* Ensured application works in different mobile devices.

**Environment:**Java (J2EE), Agile (JIRA), Swing, SQLJ, Jules, Websphere7, RSA, MKS, Putty, WinSCP, Open Make.

**American Airlines**

**Technical Lead (On-site/off-shore coordinator) (Jan 2013-June 2013)**

**Project Name: Low price calendar**

**Description:**

This project is used to display lowest prices to customer in a calendar format for 331 days in advance.

**Roles and Responsibilities:**

* Worked as a technical lead.
* Was involved in dealing with third parties to get necessary prices.
* Gathered requirements and designed the project.
* Delivered project in less time.
* Developed this in both struts and Spring.
* Planned to move from Struts MVC to Spring MVC.

**Environment:** Agile (Rally), Java (J2EE) – Struts, Spring, Hibernate, WebSphere, Junit, Eclipse 4.2, Accurev, Putty, WinSCP.

**American Airlines**

**Technical Lead**

**Project Name: AA.COM Enhancements (Jan 2011-Dec 2013)**

**Description:**

This project involves enhancing existing AACOM web application and adding new functionalities to existing application.

**Roles and Responsibilities:**

* Working as a technical lead.
* Used agile process for developing the project.
* Gathered requirement from multiple business units.
* Involved in design of enhancements in the project.
* Helped team people in analyzing issues.
* Have written ant scripts.

**Environment:** Agile (Rally),Java (J2EE) – Struts, Spring, Hibernate, WebSphere, Junit, Eclipse 4.2, Accurev, Putty, WinSCP.

**American Airlines**

**Technical Lead (March 2010-Jan 2011)**

**Project Name: Legacy Connector**

**Description:**

This project works as an interface between various services in American airlines and global mainframe SABRE system. The legacy connector functions as an adapter between client applications and the backend/legacy system. It promotes reuse & cuts development time, simplifies Legacy Interface development, makes it easier to handle endpoint/legacy system changes, provides out of the box nonfunctional capabilities, flexible Connectivity Options, provides optimized Solution.

**Roles and Responsibilities:**

* Involved in fixing analysis and bug fix request based on the severity.
* Used JCSAPI to connect to legacy systems.
* Used XML, core java and developed test cases using JUnit.

**Environment:**Agile (Rally), Java (J2EE) - XML, JBoss, core java, JMX, Junit, Eclipse 4.2, SVN, Putty.

**American Airlines.**

**Technical Lead (May 2007-March 2010)**

**Project Name: MAPS**

**Description:**

This project   manages maintenance requirements, maintains station capability information, does assignment of aircraft maintenances, tracks maintenance accomplishments, manage parts/material requirements, gets automated update of Aircraft routing changes, updates the maintenance schedules, manages Aircraft Parking and it also provides various reports. The objective of   MAPS is to produce workload schedules (bills-of-work) for people to respond to rather than providing information to people so they can generate the workload schedule.  There are several applications (or sub-systems) which interact with this project.  These major applications provide a logical approach for designing the system to satisfy the business requirements.  This will result in integrating information needed to allow the system to efficiently manage and control work to be accomplished at line maintenance stations.

**Roles and Responsibilities:**

* Worked as module lead for this project.
* Used Struts, Spring, hibernate for building the application.
* Used JUnit for writing test cases.
* Involved in fixing analysis and bug fix request based on the severity.
* Involved in design and coding of enhancement requests.
* Used Log4j to capture the log that includes runtime exceptions.
* Took additional responsibility as knowledge manager for the entire project.

**Environment:**Java (J2EE) – JSP, XML, Struts, spring, Hibernate, JBoss, Putty, Win SCP, Eclipse 4.2, SVN.

**Charles Schwab**

**Senior Software Engineer**

**Project Name: Charles Schwab Enhancements (Jan 2007-May 2007)**

**Description:**

The ‘Schwab Bond Source’ application is a trading platform for Fixed Income products designed to provide Retail Representatives, Institutional Managers and Retail Clients a robust and easy-to-use application to trade Fixed Income products.

This is an application development project with maintenance and enhancements involving requirements elaboration, design, build, testing, implementation and support.

**Roles and Responsibilities:**

* Involved in requirement gathering.
* Used XSP, XSLT for developing presentation layer.
* Took part in coding of transformers, executors for accessing Web service using cocoon framework.
* Tested the application by writing Unit test plans.
* Also involved in fixing analysis and bug fix request based on the severity.
* Took additional responsibility as configuration controller for the entire project.

**Environment:**Java (J2EE) - XSP, XSLT, Struts, Web service, Eclipse 5.1.1, Web logic, CVS, Mind Reef, Poderaso, WinSCP, Citrix client, Extra.

**American Airlines**

**Software Engineer**

**Project Name: Common Services (May 2006-Jan 2007)**

**Description:**

Common Services will provide all types of services to clients in American Airlines. It acts a middle ware between client and Mainframe database (Sabre). It follows Service Oriented Architecture. This project is developed using ejb’s and pojo classes. We had done defect fixes and took some enhancement request for this project.

**Roles and Responsibilities:**

* Dealing with all type of services in airlines industry.
* Involved in design of enhancement requests.
* Fixing analysis and bug fix request based on the severity.
* Involved in writing delegate, ejb’s and DAO layers.
* Handling web service part in different services.
* Took additional responsibilities like Defect prevention activities, Configuration controller and Knowledge Management anchor.

**Environment:**Java (J2EE)-Struts, EJB, Rational Application Developer, Eclipse 5.1.1, Web sphere 6.0, Visual Source Safe, Test Director, Putty, CoreFTP.

**American Airlines**

**Software Engineer**

**Project Name: SACDESK (Jan 2006-May 2006)**

**Description:**

SACDESK is a web application used by American airlines for automating their services such as oxygen requests, wheelchair requests, medical devices clearance and searching the status of the PNR, generating reports using COGNOS. This project is developed using Struts, EJB’s and DAO Command Pattern.

**Roles and Responsibilities:**

* Developed UI based on struts framework, using JSP, struts tag library.
* Developed presentation layer using HTML, CSS and JavaScript.
* Involved in developing and deploying EJB’s - Session Beans, java beans, and several other utility classes.
* Designed application using command design patterns.
* Used Visual Source Safe for version controlling and patching all the latest developments of the class
* Involved in Unit testing, Integration testing, regression testing and User Acceptance testing.

**Environment:**Java (J2EE)-Struts, EJB, DAO Command Pattern, Rational Application Developer, Web sphere 6.0, Visual Source Safe.

**Telstra**

**Software Engineer**

**Project Name:  QUOLL (June 2005-Jan 2006)**

**Description:**

      This project is being developed for Telstra users who are using the databases to maintain the cell data. This Quoll tool serves as a GUI tool for Telstra users for maintenance and updating of cell related data. Telstra users who are involved in billing and maintenance of cell data need to access multiple databases. To remove this drawback Quoll tool is developed to update the database easily. This project is done in two phases. First phase deals with implementation of Quoll tool and second phase handled some additional requirements to the first phase of Quoll.

**Roles and Responsibilities:**

* Developed Class diagrams sequence diagrams and state chart as part of system design.
* Interaction with client team to understand business requirements and develop the System design and prepare design documents.
* Used J2EE design patterns like Value session facade, MVC, and service Locator, business delegate, DAO and Singleton Pattern.
* Design and Development of UI Screens using JSP, Struts, JavaScript and Html.
* For reusability of Jsp pages and code we made used of Tiles & Custom-Tags.
* Designed and developed Struts Action classes and Views using Struts tag libraries
* Used Struts validator framework and custom validation.
* Actively involved in technical discussions, design reviews with Architects.
* Responsible for build & deploy for Development, QA and demo Build environments in WebSphere application.
* Involved in SQL scripting.
* Preparation of design documents, Test Plans, new JSP’s, coding for respective modules, system testing, unit testing and resolving the UAT issues and deployment of the code.

**Environment:**Java (J2EE)- Struts. Sun java studio, Eclipse, Win CVS***.***