

Profile

Dana is a senior software engineer with over 18 years experience in delivering quality projects using many languages and frameworks both in the private and public sectors. Dana is a highly experienced full stack senior developer with many years of experience with Java, C#, Typescript, Javascript, and others, working comfortably on both back and front end (React, Vue.JS) applications.

She has worked across a variety of Federal Government Departments and private organisations. Dana has also worked extensively within agile software development frameworks. Over the last few years she has developed a good knowledge of and competency with many AWS cloud technologies, including Lambda, AppSync, DynamoDB, RDS, API Gateway, S3, etc, both developing for, and configuring and deploying using terraform. She also has a good working knowledge of Microsoft Azure cloud services.

She is proficient in both back and front end development, supporting business outcomes, improving development processes, and mentoring others.

Dana is capable, methodical, and focused on delivering high value systems through quality development and collaboration.

Education

2006 | Bachelor of Software Engineering - Australian National University

Technical Skills

Programming Languages

- Java (15+ years)
- Javascript (7+ years)
- Typescript (3+ year)
- C# .NET (2+ years)
- Python
- Ruby
- SQL

Cloud Platforms

- Amazon Web Services
- Microsoft Azure

Frameworks

- Vue.js (Javascript and Typescript, Vue versions 2 and 3) single page application framework (4 years)
- React/Typescript (3 years)
- Spring Boot with RESTful web services
- JPA/Hibernate
- C# ASP .NET (3 years)
- Oracle SOA Suite (10.1.3.4) and Oracle Fusion Middleware 11g (2 years)
- Oracle ADF Faces user interface framework (2 years)

Databases

- Microsoft SQL Server
- PostgreSQL
- Oracle
- DynamoDB
- MySQL

Build Systems

- NPM
- Maven
- Yarn
- Gradle

Version Control

- Git
- Mercurial
- Subversion
- TFS

Development Environments

- Visual Studio Code
- IntelliJ IDEA
- Eclipse
- Netbeans
- Oracle JDeveloper
- Xcode
- EMACS

Operating Systems

- Windows (development)
- Linux (development and minor system administration)
- MacOS (development)

Team Skills

- Leading a team of developers, providing technical/design guidance, and directing their day-to-day technical tasks
- Introducing and leading Agile Scrum team in estimation, prioritisation and sprint planning
- Providing technical advice on planning and sequencing of tasks within a project
- Mentoring developers in new frameworks and technologies to improve stability and extensibility of existing systems
- Architecting major system components as part of project initiation
- Leading development of projects
- Collaborating with team members to create user stories and define development tasks
- Estimating and tracking effort within project schedules
- Supporting project transition to BAU
- Managing pressure and changes to project scope
- Comfortable adapting to new ways of working

Career Overview

Senior Software Engineer | Department of Employment and Workplace Relations (DEWR)

October 2024 – Present

Worked on the Disability Employment Services (DES) Transition Project, which involves transitioning over 250,000 job seekers to the new program, Inclusive Employment Australia.

Key outcomes:

- Set up/configured Microsoft Azure cloud services infrastructure to support the project using Terraform, including Function Apps, SQL Server, and Azure Data Factory
- Set up CI/CD build pipelines for Azure services on Azure DevOps
- Implemented business logic on Function Apps using C# .Net
- Used Azure Data Factory to create pipelines to orchestrate data flow to/from databases and function apps
- Implemented new UI functionality on an existing large-scale Vue.js 3 single page web application

Senior Software Engineer | Shine Solutions

October 2021 – October 2024

In her capacity as a Senior Software Engineer consultant Dana has worked on several different projects during her time at Shine Solutions.

Copyright Agency - New Resale Royalty System

Dana was the Technical Lead on the New Resale Royalty System, a complete redevelopment of legacy Resale Royalty System, whose purpose is to administer the artists' resale royalty scheme (<https://www.arts.gov.au/funding-and-support/resale-royalty-scheme>) in Australia.

- Medium sized project based on AWS services with a React/Typescript single page front-end.
- CloudFront, S3, Cognito, Lambda, RDS (Postgres), AppSync, API Gateway, EventBridge, Step Functions, Terraform, Bitbucket Pipelines
- Worked as technical lead of a team of six developers with a wide range of skills from graduate to senior.
- Responsible for the overall design/architecture of the system.
- Completed the high-level design and liaised with stakeholders during the discovery phase.
- Worked with developers to create detailed designs for and generally directed the technical aspects/architecture of the project.
- Mentored the engineers working under her, providing guidance and direction where necessary.
- Followed agile development methodology, including code reviews, sprint retrospectives, etc, to ensure a high-quality end product.
- Set up the continuous build/deployment system using bitbucket pipelines and terraform.
- Implemented the general framework of the system and many of the more complex aspects of the implementation.

Bureau of Meteorology - AFDRS project

Dana was a Senior Software Engineer on the AFDRS (Australian Fire Danger Rating System, <https://afdrs.com.au>) project, particularly the admin portal, which allows BoM staff to administer/monitor the ingestion of fire danger rating input data, view ingestion logs, and view the processed fire danger rating data in various formats (tabular, geospatial, etc).

- Engaged with around 12 weeks left in the project to develop the vast majority of the admin portal (React/Typescript SPA with AWS, lambda/python backend) for the system, which had been left almost entirely incomplete due to lack of react experience on the existing team.
- Lambda, Cognito, S3, API Gateway, Terraform, GitLab
- Successfully completed the above admin interface in time for the release, with the client being most pleased with the result.
- Updated existing, and created new terraform configurations for deploying to various AWS web services.

Bureau of Meteorology - ASAP project

Dana was a Senior Software Engineer on the BoM ASAP project, a new system to allow BoM staff to create/manage alerts for extreme weather phenomena in particular geographic areas.

- Senior front-end engineer of a new React/Typescript single page application.
- API Gateway, Cloudfront, Cognito, S3, OpenSearch, DynamoDB, Lambda.
- Designed and implemented major components of the system, on both front and back ends.
- Integrated ArcGIS mapping component into React application.
- Mentored and supported less experienced members of the development team.
- Participated in all aspects of agile software development including relative task sizing, sprint planning, retrospectives, measuring team velocity, and continuous improvement.
- Updated existing, and created new terraform configurations for deploying to various AWS web services.

Senior Software Engineer | IP Australia

July 2020 – September 2021

Dana was a Senior Software Engineer on the Patents Modernisation project, a complete redevelopment of IP Australia's Patents Workbench application.

Key outcomes:

- Used the Vue.js single page application framework and typescript for the front-end user interface.
- Used MuleSoft Anypoint framework on the back-end for business logic and database access, communicating via a REST web services interface.
- Implemented significant new functionality on both the front-end UI and back-end business logic layers.
- Actively collaborated with the team through planning, estimation and code reviews.
- Worked within an agile development methodology.

Senior Software Engineer | National Library of Australia

November 2018 – June 2020

Dana was a Senior Software Engineer on the Modernisation and Redevelopment project for the Library's flagship information discovery service, Trove.

Key outcomes:

- Primary role in architecture and development of a significant front-end Vue.js application (Trove redevelopment).
- Delivered a complete rewrite of the front end web application using the Vue.js JavaScript single page application framework, and a partial re-write of the back end to use Spring Boot and RESTful web services to interface with the front end.
- Set up the build of the front-end as part of a Spring Boot application using Apache Maven and the

front-end plugin to package the NPM components.

- Developed extensive new features for the redeveloped application, and refactored existing code to improve maintainability and functionality.
- Worked in an agile development environment and proactively participated in all aspects of agile software development including relative task sizing, sprint planning, retrospectives, measuring team velocity and continuous improvement.

Senior Software Engineer | Vix Verify Pty Ltd

July 2017 – November 2018

Dana was the Lead Developer on Vix Verify's greenID Business Verification product, a Spring Boot java application with a Vue.js single-page JavaScript front end.

Key outcomes:

- Mentored and supported Vix Verify developers in migrating existing JavaScript user interfaces to use Vue.js.
- Managed the workload of the development team, prioritised technical features, advised the Project Manager of technical constraints and risks.
- Introduced industry-standard release branching/tagging and deployment to greenID Business Verification.
- Refactored existing framework-less JavaScript front-end incrementally to a modular Vue.js based single-page UI.
- Developed large-scale new features for greenID Business, as well as bug fixing/maintenance.
- Worked in an agile development environment and proactively participated in all aspects of agile software development including relative task sizing, sprint planning, retrospectives, measuring team velocity and continuous improvement.

Senior Software Engineer | National Library of Australia

January 2016 – July 2017

Dana was a Senior Software Engineer working on the National Library's Digital Content Management system along with various of the Library's online content delivery systems.

Key outcomes:

- Implemented a Selenium-based automated testing framework for the digital content management system.
- Designed and implemented the front-end for the Library's new web archive delivery system, a single page JavaScript application.
- Worked extensively using the Java Spring MVC web application framework with a freemarker/JavaScript front end.
- Built enhancements and fixed defects for Trove Delivery, web-based digital content delivery systems and the Library's digital content management system.

Senior Software Engineer | Virgin Australia

October 2015 – December 2015

Dana was a Senior Software Engineer on Virgin Australia's accessibility project, bringing Virgin Australia's diverse websites/applications into compliance with WCAG 2.0 to the AA level.

Key outcomes:

- Updated the Velocity Frequent Flyer website, running on the Oracle Stellent content management system.
- Modified site templates and content to bring to WCAG 2.0 compliance.
- Added keyboard functionality to JavaScript site elements, etc.

Senior Software Engineer | Gecko Informasjonssystemer AS, Norway

March 2013 – May 2015

Dana was a Senior Software Engineer on Gecko Informasjonssystemer's flagship case handling product ePhorte, a large enterprise application mainly written in C# .NET, with an ASP based user interface, and some smaller modules written in VB .NET.

Key outcomes:

- Worked on the future front-end to the ePhorte system, a single page JavaScript application based on the Durandal framework, which will replace the older ASP .NET based user interface. This interface connects to the core back-end of the system through odata RESTful web-services.
- Developed a stand-alone service to monitor the creation and modification of documents within the ePhorte system, and asynchronously generate preview images and thumbnails if a change in the document data was detected.
- Developed the integration of ePhorte with Digipost and Altinn (two of Norway's digital post box solutions) for both searching against their address registers, and expedition of digital post to these services from within the ePhorte system.

Application Server Administrator | Alm. Brand Insurance, Denmark

June 2011 – July 2012

Dana was an Administrator of enterprise applications servers, primarily Oracle Weblogic (version 10.3) and OC4J.

Key outcomes:

- Managing the deployment of enterprise java applications to the instances and their progression through the different environments, test, demo, and production.
- Installation and configuration of Weblogic server environments.
- Administration of several Oracle Universal Content Management servers powering Alm. Brand's website and Intranet, including:
 - Installation and configuration of new UCM instances
 - Setting up replication/syncing between development, test, and production UCM instances
 - Day-to-day administration.
- Administration of Oracle SOA Suite environments, SOA composites, Oracle Service Bus, and Oracle BAM, including deployment and troubleshooting.
- Developed and maintained a tool to automate the management, archiving, and deployment of java enterprise applications and various SOA suite applications to Alm. Brands diverse servers and environments whilst maintaining control over and keeping track of the different application versions deployed to each server instance and environment.
- Day-to-day administration of many Weblogic instances spanning many different servers and environments.
- Troubleshooting of application server related incidents on the above-mentioned systems.

Software Engineer | Readsoft, Denmark

March 2009 – June 2011

Dana was a Software Engineer working on PROCESSIT, an enterprise invoice processing and approval workflow for Oracle E-Business Suite.

Key outcomes:

- Developed with a business logic core of BPEL processes, accessing the Oracle database back-end via various Java web-service APIs (SOAP and JAX-WS). User interface developed using Oracle ADF Faces and data-access layer developed using Oracle Business Components.
- Built new features for PROCESSIT in Java using ADF Faces, and back-end business logic using BPEL.
- Developed an installation and packaging system for a complex enterprise application consisting of BPEL, SQL, Java web-services and ADF Faces user interface components. Implemented automated building/packaging of the aforementioned application integrated with the continuous build system Bamboo.
- Developed a custom authentication provider for Oracle Weblogic application server that allows authentication against Oracle E-Business Suite users.
- Performed administration tasks for the continuous build server (Bamboo) as well as the version control server (SVN).

Software Engineer | National Library of Australia

October 2006 – October 2008

Dana was a Software Engineer working on the Library's various in-house collection management applications.

Key outcomes:

- Developed the Oral History Audio Delivery system, making many of the Library's oral history interviews available online. Built in Java with Apache Wicket front end and Spring/Hibernate in REST-based web-service back end to interface with ORACLE database.
- Developed the Rights Management System in Java using Spring/Hibernate back end with Spring MVC front end using XSLT for the display.
- Developed the Pandas version 3, the NLAs web archiving and display system.