[**Damodar Shanke**](http://au.linkedin.com/in/damodarshanke) **[](https://www.certmetrics.com/amazon/public/badge.aspx?i=2&t=c&d=2020-03-13&ci=AWS00621973)** [](https://www.certmetrics.com/amazon/public/badge.aspx?i=1&t=c&d=2020-03-02&ci=AWS00621973)

**AWS Cloud Engineer / Software Engineer**

Sydney, NSW l Phone: 0404 930 412 l [d\_shanke@yahoo.com](mailto:d_shanke@yahoo.com)

* **AWS Cloud Managed DevOps** and **Automation**.
* Experience in **developing/migrating applications from on premises onto AWS platform (EC2|ASG|ELB|RDS|Storage [EBS|EFS|S3] |ECS|SNS|SES|CloudFormation|VPC|Lambda|API Gateway|Cloudwatch|etc.)**
* Automation using **Jenkins**, **Ansible**, **Jinja2, UNIX Shell Scripting**, **AWS CLI, SAM CLI, CloudFormation, Python, Hashicorp Terraform, Hashicorp Packer, Docker**
* Designed & Implemented Oracle Database 12.x on EC2 where the data files for the database is implemented on EBS volumes along with feature of creating database snapshots and recovery from database snapshots.
* Experienced in Software Analysis and Design, Requirements Gathering, Prototyping/Proof of Concept, Task Estimation, **Coding**, **Design Patterns**, **Performing Design Reviews** and **Code Reviews**, Software and Design Documentation, Test Automation, Unit Testing, Managing Change Controls.
* **Software Engineer (primarily C++ OOAD development** on both **UNIX** and **Windows platform & also worked with java|C#|vb.net|python programming languages)** with more than 14 years’ experience in developing leading-edge solutions in security compliance and financial domain. progressing from problem statement to well-documented design and successful implementation there on. Migrating/Porting C++ Application from Windows to UNIX platform and across inter UNIX platforms
* Experience of handling a group of 5-6 resources acting as their technical lead in addition to taking responsibility of estimation, task planning, and providing regular status updates to relevant stake holders.
* Results-oriented, intelligent, enthusiastic, self-starter and a committed software developer with proven ability to work creatively and analytically in a fast-paced problem-solving environment.
* Hands-on experience across all stages of software development life cycle (**SDLC**) using **Waterfall** and **Agile** (**SCRUM**) methodologies.
* Experience in working on high priority customer escalations and ensuring timely resolutions of such reported issues while supporting real-time distributed systems.

**Technical Skills**

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| --- | --- |
| **DevOps (AWS) & Automation** | **AWS services** (EC2 |ASG |ELB |RDS |Storage [ EBS |EFS |S3] |EC|SNS |SES |CloudFormation |VPC |Lambda |API Gateway |AWS CLI | etc.) / Docker / Ansible / Jinja2 templating / Shell Scripting / Working knowledge of Python & Perl, Jenkins, Hashicorp’s Packer for baking AMIs |
| **Languages** | **C, C++, C++11**, **C++/CLI,** Visual C++, .NET (**C#, VB),** SQL, SQL Stored Procedures, HTML, XML, Maintenance/Enhancements of Ruby, Python, Shell Scripts and Java applications. |
| **Libraries / Frameworks** | **STL**, Windows SDK, Windows API, MFC, .**NET**, SQLite, BSD Socket library, Winsock, open-source packages (ICU, boost, gsoap, tinyxml, openssl), BEA Tuxedo, google test, AWS Development Tools |
| **IDE and Tools** | Visual Studio 2010/12/13, VC++, nMake, msbuild, gcc, gmake, gdb, Source Control (VSS, SVN, CVS, Perforce), doxygen, Coverity (static analysis tool), Valgrind (dynamic analysis tool – memory profiling), Bulls Eye code coverage, Eclipse, Netbeans, SlickEdit |
| **Concepts** | OOA/OOD (UML, Design Patterns, Refactoring), Multithreading/Multiprocessing, Socket Programming, Obfuscation, Encryption, Data Structures, Algorithms, Cloud Computing |
| **Systems** | Windows 2003/2008 (R2)/2012/7/8, UNIX (Linux, Solaris SPARC) |
| **Databases** | **Oracle** 9/10/12, MS SQL 2000/2005/2008 (R2), MySQL, SQLite, Sybase |

[**Awards**](http://au.linkedin.com/in/damodarshanke)

* Received Kudos rewards for simplifying the design of landing zone for hosting internet facing applications.
* Received multiple awards at NAB. This also includes an **MVP** (most valuable player in last quarter of 2018) and the Quarterly award for the quarter in which I revived the database partitioning process and for quick fix of a non-severe but irritating bug which was logging many incidents against our application and the fix for which was not being prioritized due to high estimates that were attached to it.
* Received multiple awards at various levels [L1/L2/L3/L4 (highest)] at Symantec in Year 2008/2009/2012/2013 for performance and pro-actively resolving customer issues.
* Received ‘Valuable contribution Award’, at iGate (Patni) for the quarter January 2005 to March 2005 for the contributions made on crucial projects.

**Career highlights and achievements**

* Building and enhancing AWS Landing zone with adequate controls to provide secure environments where application teams can host and deploy their application safely.
* Built the Redshift service stack in ZAZ(Spain) and [ZRH(Zurich)](https://aws.amazon.com/blogs/aws/a-new-aws-region-opens-in-switzerland/) Region.
* Designed and migrated work loads of on-premises application to AWS with monitoring, backup and restore solution using AWS services and ansible & shell scripts for automation/provisioning, which now allows to stand multiple environments at will within matters of few minutes. The solution also includes a home-grown Oracle Database on EC2 solution with ability to create snapshots & restore/recover from those snapshots.
* Successfully **designed and implemented** the complex MITR Tax regime rules mandated by ATO in Unison Unit Pricing application. Reduced the initially estimated waterfall model estimates by 50% by adopting an agile prototype driven approach which allowed early testing of application.
* Designed and implemented integration of Reputation technologies in CSAPI (Content Scanning APIs) component which is the core scanning component of Symantec Protection Engine, during a period of resource crunch without affecting delivery timelines. While working on this new module, I detected and fixed an underlying design issue in existing core modules due to which files were being copied and scanned more than once. This reduced the scan cycles by 30%.
* Enhanced performance by 50% in the Enterprise Security Manager’s Account information module by implementing local cached with TTL, avoiding redundant LDAP calls.
* Implemented password hash generation algorithm in Sybase 15.x only by looking at the somewhat vague documentation provided by Sybase. The algorithm was used for detecting weak passwords using dictionary-based cracking.
* Introduced, Conceptualized, and implemented an application module in Enterprise Security Manager compliance product which implemented and used the VMWare’s vSphere Web service, for the purpose of retrieving compliance & security data which help with auditing the VMware infrastructure.

**Professional Experience**

[**Insignia Financial**](https://www.insigniafinancial.com.au/)**, Sydney**

**Designation**: Principal Cloud Engineer II (Since July 2023)

• Automated AWS Firewall Manager provisioning, setting up WAF in member accounts, centralized logging integration with Secureworks SIEM, and SCP deployment to prevent policy tampering.  
• Designed AWS Landing Zones to host public-facing applications, utilizing SCP, NACL, and WAF for automated global and regional resource association.  
• Conducted architecture reviews, where feasible advising teams to use self-managed or service-managed StackSets, identifying cost-saving and reliability improvement opportunities.  
• Facilitated AI service adoption by guiding application teams in the use of AWS AI tools such as Bedrock, Transcribe, Textract, and Rekognition.  
• Developed granular SSO role mechanisms, allowing application teams to independently define and attach policies, reducing dependency on the Platform team.  
• Design and Implement centralized RDS monitoring using AWS OAM, integrating automated alerts with ServiceNow, webhook channels, and email.  
• Design & Implement data bunker solution for automated cross-account, cross-region backups to meet one of the CPS230 requirements.  
• Developed serverless bots for cost optimization, performing periodic cleanups of stale EBS volumes, residual snapshots, and AMIs, while driving Savings Plans and Reserved Instances based on AWS usage patterns and recommendations.  
• Mentoring junior team members to develop solutions aligned with the AWS Well-Architected Framework, fostering best practices in architecture design.

[**Amazon**](https://www.amazon.com.au/)**, Sydney**

**Designation**: System Development Engineer II (May 2021 – June 2023)

I was part of the global AWS Redshift Service Team. Redshift is the leading cloud data warehouse database for Business Intelligence and Analytics. Accustomed to dealing with thousands of transactions per second in datacenters distributed worldwide in systems designed for high scalability and fault tolerance.

* The following tasks are performed as part of daily activities:  
  Building Redshift stacks for new Regions (Data Centers) and deployment, Continuous improvement of process via Automation thereby Reducing time to market.
* The System development stacks comprise of wide variety of languages such as Java, Ruby (for infrastructure automation), Python and Shell Scripting.
* Develop solutions using AWS services like DynamoDB, RDS Postgres, EC2, Lambda, SWF
* Involved in production support (SRE / Sev2 handling) to keep customer clusters available according to SLA with minimum RTO, troubleshooting recurrent problems to reduce operational workload and identifying, proposing & developing solutions to fix common issues.
  + Create and review designs for new features being released to the customers using Continuous Integration – Continuous Development pipelines.
  + Reviews code produced by team members to improve readability, consistency, coverage, and best practices

**[Cevo](https://cevo.com.au/)**, **Sydney**

**Designation**: AWS Consultant (Feb 2021 - May 2021)

My role was to help implement solutions using AWS services for Cevo clients. I worked at AMP during this tenure.

I was directly involved in helping AMP Business team insource back their Generation 1 Cloud infrastructure stack which was manually managed by an external vendor.

The insourcing included automated management and monitoring of AWS cloud resources and improving the permission model of the resources. In addition to that the handover documents were prepared with adequate processes put in place to manage the lifecycle of the insourced systems.

[**National Australia Bank**](https://www.nab.com.au/)**, SydneY**

**Designation:** Senior Analyst Engineer (**Since October 2014**)

* Migrating multiple On-Premises Application from to AWS Platform.
* Designed and Contributed to Architecture of Prod and non-prod AWS Environments.
* Also implemented solutions for hybrid environments where Prod workload is hosted on premise Datacenter and non-prod workload is hosted on AWS platform.
* Implemented Ansible, CloudFormation & Jinja2 based Automation to deploy infrastructure as code.
* Implemented Automation of Deployment of new releases for long lived environments (This was a necessity with Hybrid setups)
* Design, development, testing, documentation, maintenance & support of Unison Application which is MLC Wealth’s primary Unit Pricing Application.
* Liaising closely with business stakeholders as well as providing support to the live environment, including the quick resolution of potential issues that interrupted critical business processes.
* **Tools & Libraries:** C/C++ | C# | VB.NET | STL | Visual Studio 2010 | NetBeans | Make | xlc | idebug | AIX | Linux | Oracle | TOAD | SQL | PL/SQL | Shell scripting | ControlM | Remedy | AWS [EC2 / RDS] | Bea Tuxedo | AWS EC2 | AWS S3 | AWS \*

**WMS Gaming, Sydney** – *is a leading global innovator in the design, manufacture and distribution of electronic and digital gaming entertainment and gaming machines for the casino industry.*

**Designation:** Senior Software Engineer (**Mar 2014 – October 2014**)

* Developed standalone reel slot games – CoronadosGold, RedEagle, FarEastFortuneDeluxe
* Development of reel slot games using C++, proprietary framework and customized embedded OS.
* Designing interfaces and implementing new modules (libraries).
* Implementing the User Interface based on MVC Design pattern.
* Working on reliability and performance areas by detecting and fixing memory leaks using tools such as Visual Leak Detector, Valgrind, etc.
* **Tools & Libraries:** C/C++ | Boost | STL | Python | Perl | Slick Edit | NetBeans | Make | gcc | gdb | UNIX (CentOS) | CVS

**Symantec CORP, India** – *is a multibillion-dollar American computer security, backup and availability solutions Software Corporation headquartered in Mountain View, California, United States*

**Designation:** Software Engineer / Senior Software Engineer / Principal Software Engineer (**Nov 2006 to Jan 2014**)

* Worked on Symantec’s flagship security compliance product which are implemented in C++ on Windows and UNIX platforms
  + CSAPI component – Content Scanning API is a façade to various scanning technologies and provides easy to use interface to the consumers.
  + Control Compliance Suite (CCS) – CCS is an agentless security compliance enterprise product which works in a distributed environment.
  + Enterprise Security Manager (ESM) – ESM is cross-platform agent-based security compliance enterprise product which works in a distributed environment.
* Worked as a team lead as well as individual contributor on multiple deliverables.
* Designed interfaces and modules from scratch in C++ (Windows and UNIX) following SDLC phases.
* Worked on reliability and performance areas by detecting and fixing memory leaks using tools such as Visual Leak Detector, Valgrind, etc.
* Worked on optimization of scan algorithms (CSAPI) for high throughput by avoiding creation of multiple copies of files.
* Fixed race conditions in multi-threaded environment within ESM Agent’s job management module.
* Worked on compiler upgrades (C++) for product components as well as legacy/third party components.
* Ported 32-bit C++ products to 64-bit environment.
* Migrated C++ application to support newer versions of MS SQL, Oracle, and Sybase
* Developed new C++ client module from scratch on Linux platform using the WSDL files provided by VMware vSphere Web Service SDK to interact with the vSphere Web Service.
* Worked on C# and developed C++/CLI module which allowed reuse of C++ native libraries (static and dynamic) in managed application on Windows platform.
* **Tools & Libraries:** C/C++ | C# | Python | Perl | MS SQL | Sybase | Oracle | MySQL | Visual Studio | Make | gcc | gdb | UNIX (Solaris / Linux) | Windows OS | Java | Eclipse | Perforce | Valgrind | Coverity

**Tech Mahindra Limited, India** – *is a $2.9 billion company with over 87,300+ professionals, its proven global delivery models, distinctive IT skills and decades of domain expertise help clients realize their business aspirations.*

**Designation:** Senior Technical Associate

* Worked on dialogue based MFC ‘Bulk Sealer’ application using VC++. The bulk sealer utility transformed data and source files into proprietary customized protected format.
* Worked on context sensitive screen capture protection feature using Windows APIs and hooking techniques.

iGate **(**erstwhile **PATNI), India** – *is a NASDAQ-listed, US-incorporated outsourcing company which provides information technology, consulting, and business process outsourcing (BPO) services.*

**Designation:** Senior Software Engineer

**Tools & Libraries:** C | C++ |STL| VC++| Rhapsody in C++ | MFC | Multithreaded programming | winsock library for socket programming | TCP/IP | SQLite 3.x.x library | Tortoise SVN & WinCVS for version control.

**Projects**:

* **PCL Printer Testing [Team Size: 9] - For U.S based client manufacturing Printers**

**Duration:** Apr 2006 – Aug 2006

* + Designed and developed test suite using C++ and PCL (printer command language) programming.
* **MXIP PROJECT (Team Size: 4) – For Japanese client specialized in optics and imaging products**

**Duration: Jan 2006 – April 2006**

* + Designed and implemented data structures and Blob analysis algorithms in C++ as a part of the image processing library.
  + Designed and implemented C++ console-based test automation tool for the image processing library.
* **MC 14 LCD Panel Manager (Team Size: 2) – For Japanese client specialized in imaging and electronics**

**Duration: Sep 2005 - Jan 2006**

* + Designed and implemented different modules of the interface, using Rhapsody in C++.
  + Used Rhapsody modelling tool to create numerous state and transition diagrams and did event-based programming in C++.
* **HDMI Key Provisioning (Team Size: 3) – For U.S based client specialized in multinational digital technology**

**Duration: Mar 2005 – Aug 2005**

* + Developed multithreaded client server application using C++ and winsock library and which catered to request based automated HDMI key provisioning mechanism to a Digital Multimedia embedded system.
  + Developed dialogues-based GUI tools using MFC and VC++ to manage the HDMI keys. It provided features like Delete, Restore, Import, and Export and to show live statistics of key provisioning server.
* **PolicyCAD 1.0 (Team Size: 5) – For U.S based client specialized in identity-driven access management solutions**

**Duration: Jan 2005 - Mar 2005**

* + Implemented the dialogue based PolicyCAD tool using MFC and VC++ which displayed user objects fetched from Active Directory and allowed to map it against various policies.
* **3DViewer MDI App. (Team Size: 5) - For Japanese client who are specialized in producing sensors, barcode readers, vision systems, measuring equipment and digital microscopes**

**Duration: Sep 2004 - Jan 2005**

* + Migrated SDI application to multi-threaded MDI application using MFC and VC++
  + Added thread safety to the multithreaded application which now took care of multiple data stack (images).

Phil Systems**, Goa, India** – *a product-based startup which focused on photo id software.*

**Management Trainee (Programmer),** Mar 2004 to Aug 2004

* **Smart Card Integration into EasyCard Product (Team Size: 1)**
  + Implemented C++ interface-oriented library into which various Smart card library could be plugged in to cater to smart card readers from variety of vendors.

**Education**

* B.E. Computer Engineering, August 2003. R.M.C.E.T, University of Mumbai.
* Diploma in Computer Engineering, October 1998. Agnel Polytechnic, Goa. (Goa Board of Technical Education).