**Delbert Aud**Solutions Architect, Data Engineer and Professional Programmer  
delbert.aud@gmail.com | 702-449-2337 | Henderson, NV  
<http://delbertaud.github.io> | <https://www.linkedin.com/in/delbertaud>

**Executive Summary**

Highly accomplished technology professional with expertise spanning solution architecture, development, data science, and process engineering. Certified Information Systems Security Professional (CISSP) holder, leveraging deep knowledge of information security controls to drive business success. Proficient in multiple programming languages (Python, C++, Java, etc.) and database systems (Oracle, MySQL, PostgreSQL), as well as cloud infrastructure from leading providers AWS and Google Cloud Compute.

**Key Strengths:**

* Offered strategic guidance, innovative solutions, and technical expertise to multiple leading corporations as a solution architect and Information Technology Consultant.
* Led multiple projects as Technical Team Lead, overseeing the direction and execution of various initiatives.
* Highly knowledgeable about the latest advancements and innovations in information technology.
* Utilized cutting-edge artificial intelligence (AI) tools like OpenAI, LLaMA, and other leading platforms.

**Data Engineering & Science Experience:**

* Automated Ivanti ticket assignment process using Python and REST.
* Created Java-based solution for testing Avaya Telephone Systems.
* Developed system to collect data from various tools and upload it to SQL Server database.
* Implemented several Elasticsearch solutions to support search and ranking requirements.

**Automation & Process Engineering Experience:**

* Identified business opportunities for Robotic Process Automation (RPA) and advised on implementation.
* Developed enhanced performance solutions using Python and Excel Automation.

**IoT Experience:**

* Created a highly accurate and efficient liquid filling solution by combining innovative electronics (Arduino) with mechanical components (load cell) and pumping technology, optimized for seamless operation in a manufacturing setting.

**TECHNICAL PROFICIENCIES**

**Operating Systems:** Linux, Windows, MacOS

**Cloud:** Amazon Web Services (AWS), Google Cloud Compute, Rackspace, Digital Ocean

**Programming Languages:** Python, C, C++, Java, C#, JavaScript, Visual Basic, Go, SQL, Fortran, PHP, COBOL, R, D

**Databases:** Relational, NoSQL, Graph, Oracle, MySQL, Microsoft SQL Server, PostgreSQL, MongoDB, Redis, Elasticsearch, SQLite, Microsoft Access, MariaDB, Neo4j

**Virtualization:** VMWare ESXi, Microsoft Hypervisor, Oracle VirtualBox, Docker, Kubernetes, Podman, Proxmox

**Automation Pipelines:** NodeRed, Apache NiFi

**Automation Tools:** Vagrant, Ansible, Robotic Process Automation (RPA), Automation Anywhere, Google DialogFlow, Selenium

**AI/ML:** ChatGPT, Ollama, LangChain, CrewAI

**PM Methodologies:** Waterfall, Scrum, Agile, Kanban

**Accreditation Processes:** DITSCAP, DODAF, DIACAP

**Certification:** CISSP - Certified Information Systems Security Professional  
Since 03/10/2014 (479580)

**Education:** College of Southern Nevada, AAS, CIT-Software Programming

**US Right to Work:** United States Citizen

**EDUCATION**

**College of Southern Nevada**Bachelor of Applied Science  
Project Management  
May 2024 to Present

**College of Southern Nevada**Associates of Applied Science  
Computer Programming  
September 2022 to December 2023

**PROFESSIONAL EXPERIENCE**

**Bath Bomb Xpress**Portage, Wisconsin  
IoT Architect  
May 2024 to Present

**Arduino System Development**

* Developed an advanced liquid filling solution for factory bottle filling that harmoniously merged electronic intelligence, Arduino's C programming language, mechanical sensing capabilities, and pumping technology, optimized for real-time performance and reliability within a manufacturing setting.
* Developed a drink dispensing solution that accurately dispenses two liquids to yield an accurate final quantity.

**ConvergeOne, Programmer**Bloomington, Minnesota  
Data Engineer  
June 2016 to May 2024

**Software Development**

* Developed a suite of sophisticated solutions that leverages the strengths of multiple technologies – including classic ASP, Python, Excel VBA programming languages, Microsoft SQL Server, Elasticsearch and vendor-specific REST endpoints to meet company provided requirements.
* Employed the Avaya DMCC library in creating a Java-based application that successfully interfaces with Avaya Telephone Systems, guaranteeing efficient and trouble-free installations of new systems.
* Developed a system to collect data from various Avaya tools and upload it to SQL Server database running on CentOS via web REST interface, using Go language and Microsoft SQL Server.
* Created an intuitive dashboard system that provides users with actionable insights into critical help desk ticket information, leveraging classic ASP programming language and integrating with a SQL Server reporting database.

**Data Science & Management**

* Developed a solution that integrated enterprise alarm systems with asset data to identify the noisiest equipment, leveraging Elasticsearch's search capabilities, an Enterprise SQL Server environment for data retrieval, Python programming language for data cleaning and analysis, ChartJS library and Excel for visualization.
* Conducted in-depth graph analytics using Neo4j and the Python NetworkX library to identify the underlying causes of system failures, both upstream and downstream, providing a comprehensive view of complex system relationships.
* Designed and implemented a custom wrapper around the Sophos Antivirus data collection tool, enabling seamless integration with Elasticsearch for efficient and scalable long-term data retention, thereby satisfying stringent audit requirements.

**Automation & Process Engineering**

* Offered expert consulting services around Robotic Process Automation (RPA), providing strategic guidance on implementation using innovative tools such as Automation Anywhere, Apache Nifi, NodeRed, Python, and Golang to align with and enhance business operations and goals.
* Contributed Python and Excel VBA development expertise to the RPA team, leveraging innovative coding techniques and best practices to optimize automation solution performance by as much as 500%, resulting in significantly improved process efficiency.
* Utilized Python programming language to develop an automation solution for Ivanti ticket assignment, leveraging REST endpoints and database connections to intelligently assign tickets based on technicians' skills and availability.

**Hewlett Packard Enterprise Services**Spring, Texas  
Senior Consultant  
September 1995 to June 2016

**Technical Leadership and Consulting**

* Served as Technical Team Lead for multiple development teams within the Navy Marine Corps Intranet (NMCI) and Bank of America, overseeing technical operations, conducting staff evaluations, providing mentorship support, and presenting team capabilities to internal stakeholders.
* Mentored software engineers in developing intricate solutions, overseeing project execution and certification processes to guarantee high-quality outcomes.

**Software Development**

* Collaborated with the NMCI team to develop a comprehensive solution for the Classroom project, leveraging C# programming language and integrating with a Microsoft SQL Server database. This innovative system enabled student account registration and automation, supporting the Department of Navy's training program.
* Provided development services for the eClaim web-based application, leveraging a combination of Windows NT 4.0, Internet Information Services (IIS) 4, Visual Basic, and VBScript programming languages.
* Designed and developed a system that integrates Discovery Toys' Web site with their AS/400 order-taking system, utilizing Visual Basic programming to control the host via TNHost 5.250 terminal software.
* Collaborated on the development and maintenance of Unigraphic's IMAN PC product, leveraging Visual Basic version 4 and C++ API functions to facilitate communication between a Windows-based application and a UNIX server via Remote Procedure Calls (RPC).
* Designed and implemented a comprehensive data migration plan for transitioning data from a FoxPro database application to EDS REMMS system.
* Designed and developed automated systems leveraging a range of technologies including Windows NT, Microsoft IIS Web Server, O’Reily Website Web Server, Active Server Pages (ASP), Microsoft Open Database Connectivity (ODBC), Oracle Object for OLE (OO4OLE), Microsoft FrontPage, Oracle 7.x, Visual Basic (VB), and Crystal Reports.
* Created an extensive collection of Excel-based reporting tools using Visual Basic for Applications (VBA), which extracts data from an Oracle database and compiles it into comprehensive reports tracking support metrics across various divisions.

**Scripting & Automation**

* Utilized automation tools to optimize Excel file generation through OBIEE, leading to a 75% decrease in file access times and storage requirements for the Butterfield Bank Auxiliary Projects Account.
* Designed and developed a suite of automated scripts and web-based applications to facilitate the successful rollout of Quantum desktop solutions for American Airlines' internal operations.
* Developed customized packaging solutions for automated software installations at Rolls-Royce, enhancing efficiency and reducing manual intervention.
* Deployed an Oracle 8.0 database solution at the Department of Health Services, Los Angeles County account, while providing exemplar code samples in Cold Fusion and ASP languages to facilitate automation and reporting capabilities.

**Server Installation & Configuration**

* Implemented and managed server environments using the IBM License Use Management (LUM) solution to monitor and track software license utilization at Northrop Grumman.
* Designed and implemented Oracle database solutions as well as email infrastructure for a range of clients, including SBC and KMN.

**Database Management & Programming**

* Designed and developed SQL Server-based stored procedures that supported Microsoft's worldwide legal compliancy tracking initiative by providing robust data management capabilities for non-work time reporting.
* Provided expert-level SQL programming skills, developing custom solutions to optimize batch processing for Johnson & Johnson.
* Successfully migrated sensitive advertising data from Oracle-based systems to a publicly accessible website, streamlining operations for the Orange County Register.

**Web Development**

* Enhanced online platform used for monitoring and recording safety survey data, as well as generating reports, at US Borax.
* Collaborated in the development of a comprehensive online platform for the California Healthy Families program using a combination of ASP, VBScript, XML, and SQL Server technologies.

**General Consulting**

* Provided high-level consulting services to Universal Music Group, focusing on the successful migration of complex systems and applications. This included developing comprehensive "How To" guides that empowered various teams to manage technical and process-related aspects with confidence.
* Offered strategic guidance on Year 2000 (Y2K) compliance issues, providing expertise to both NASD and Associated Bank.
* Provided expert-level consulting services to assess the current state of the customer's IT infrastructure and offer actionable recommendations for optimization, education of the DBA team, and potential upgrades to better utilize existing resources.

**American Honda**Torrance, California  
Programmer  
October 1993 – July 1994

**Programming/Consultant**

* Provided expertise in programming and consulting services on Dealership Communications System (DCS), a complex, high-transactional system integrating dealership, corporate, and parts ordering information systems for American Honda. Utilized Visual Basic programming skills to develop solutions that streamlined communication between dealerships and corporate offices.