

ALAN VERDUGO

Software engineer

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COMPETENCES

Data analysis	Pandas, Matplotlib, Jupyter notebooks, Google Analytics
Programming	Python, Shell scripting, PowerBuilder
Databases	MySQL, DB2, PostgreSQL, MongoDB
Operating systems	GNU/Linux (Redhat, Centos, Debian, Ubuntu Server), AIX, Windows
Others	Docker, Git, Travis CI, OpenShift, Markdown, LaTeX, Cron, Jira, Hadoop, Agile methodologies

PROFESSIONAL EXPERIENCE

November 2018 Present	Software engineer, IBM <ul style="list-style-type: none">➤ Designed, developed, tested and documented code for the migration of monolithic ETL processes into a continuously integrated DevSecOps pipeline based on RedHat's OpenShift.➤ Implemented and improved coding standards' compliance, including PEP8, test coverage, security assessments and code complexity analysis.➤ Designed and implemented the secrets-sharing strategy of all our applications with Hashicorp Vault.➤ By implementing CI/CD tools, I incremented the development team's throughput while reducing the error rates and migrating from an IaaS architecture to a cloud and container-based architecture.➤ Designed and implemented our monitoring strategy of all our applications with the use of New Relic.➤ Our successful code builds required full PEP-8 compliance, unit test coverage (> 80%), and cyclomatic complexity validations, all this while adhering to IBM's strict security standards.➤ Presented local and company-wide training sessions in topics like automation, monitoring, security, containers, documentation and development best practices.➤ Member of IBM's core Python team in Mexico, designing and presenting courses, conferences and hackatons.➤ Co-authored an IBM Redbook (refer to the publications section). <div>Python OpenShift FastAPI GitHub Docker Pandas Travis CI Hashicorp Vault DB2 PostgreSQL RHEL Xenon Bandit New Relic LogDNA</div>
June 2018 November 2018	Software engineering team lead, AMDOCS <ul style="list-style-type: none">➤ Led and mentored a development team across multiple geographies.➤ Processed, analyzed and reported the data of a major telecommunications company. <div>Python Spark SQL ETL Cassandra Qlikview</div>
June 2014 June 2018	Software engineer, IBM <ul style="list-style-type: none">➤ Collected, processed, curated and reported all of the billing data for IBM's AppOps Team. By enhancing existing code and developing new programs, I automated the processes and increased the revenue of the team in thousands of dollars per month. <div>Python SQL ETL GitHub IBM Smart Cloud Cost Manager IBM Tivoli Usage and Accounting Manager DB2</div>
April 2013 June 2014	System administrator, IBM <ul style="list-style-type: none">➤ Supporting, troubleshooting, installing, configuring, migrating and developing all kinds of software and servers. Specialized in the Unix platform and its variants (GNU/Linux, AIX, etc.) <div>RHEL AIX Websphere Application Server Nagios</div>
September 2012 April 2013	System administrator, ELECTRONIC ARTS <ul style="list-style-type: none">➤ Launching, supporting, troubleshooting, and enhancing thousands of servers and applications in the cloud, used for videogame traffic and data processing for millions of concurrent users. <div>Debian Python MySQL Nagios</div>
November 2007 September 2012	Programmer analyst, AUTOZONE <ul style="list-style-type: none">➤ Troubleshooting, debugging, maintaining, developing and enhancing systems in a wide variety of programming languages and operating systems in a production environment for a Fortune 500 company.➤ Received two <i>WITTDJR</i> (<i>What it takes to do the job right</i>) awards for delivering an excellent customer service and one <i>Extra Miller</i> award for "going above and beyond the call of duty, exceeding expectations and consistently doing more than expected." <div>PowerBuilder SQL C Java Perl Bash Jira MySQL Informix PostgreSQL</div>

CERTIFICATIONS

CompTIA Linux+ LPIC-1	Valid from: Sept. 2016 Verification code: DQPR3E9HCDVE1WSN
Google Analytics Individual Qualification	Valid: Sept. 2016 - Sept. 2021 LPI ID: LPI000368945 Verification code: pfbbjhavvj
	Valid: Jan. 2018 - Jul. 2019

COURSEWORK AND TRAINING

MongoDB, Inc.	<i>MongoDB for developers</i>
IBM	<i>Big data foundations</i>
Wizeline academy	<i>DevOps crash course</i>
University of California at San Diego	<i>Python for data science</i>
Wizeline academy	<i>Portable Stream and Batch Processing with Apache Beam</i>
IBM	<i>Applied Data Science with Python</i>
Google	<i>Data Engineering on Google Cloud Platform Specialization</i>
IBM	<i>IBM Cloud Kubernetes Service</i>
IBM	<i>DevOps Essentials</i>

PROJECTS

June 2016 October 2016	Cognitive Concierge, IBM <ul style="list-style-type: none">> Our team trained and configured speech recognition patterns along with questions and answers in order to program a set of humanoid robots who could understand and answer natural language questions about IBM, Watson, cloud technologies, robotics and nearby locations.> A <u>fully-working demo</u> was presented publicly during the <i>World of Watson</i> conference in Las Vegas. <div>SoftBank Robotics' Nao and Pepper humanoid robots Watson Natural-language processing Speech recognition</div>
January 2016 March 2016	Hadoop Raspberry Pi Cluster, IBM <ul style="list-style-type: none">> Built a fully-working 12-node Hadoop cluster with Raspberry Pies including setting up the environment in each node, testing it and presenting a demo to high management in order to demonstrate the feasibility of using Raspberries as an affordable cloud offering to entry-level clients.> Documented the entire process and published it on the IBM developerWorks site. <div>HDFS Raspberry Pi</div>
2020 2021	Gilbert (Educational open source mobile application), INDEPENDENT <ul style="list-style-type: none">> Built a <u>mobile application</u> aimed at helping college students to learn about electricity and magnetism.> Documented and <u>published</u> the entire application as free and open source software. <div>Python Kivy</div>

PUBLICATIONS

Red Hat OpenShift V4.X and IBM Cloud Paks on IBM Power Systems (Volume 2)

<http://www.redbooks.ibm.com/abstracts/sg248486.html?Open>

ISBN-10: 0738459569

ISBN-13: 9780738459561

Implementing and Managing a High-performance Enterprise Infrastructure with Nutanix on IBM Power Systems

<https://www.oreilly.com/library/view/implementing-and-managing/9780738458564/>

ISBN-13: 9780738458564

Desarrollo de una aplicación educativa móvil para el aprendizaje de fundamentos de circuitos eléctricos

<https://tinyurl.com/37t52s7b>

ISSN: 1405-2172