

# ALAN VERDUGO

## Software engineer

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📍 Guadalajara, Mexico

in [linkedin.com/in/alanverdugo](https://www.linkedin.com/in/alanverdugo)

🐙 [github.com/alanverdugo](https://github.com/alanverdugo)

📡 [kippel.net/blog](https://kippel.net/blog)

## 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	<b>Software engineer, IBM</b> <ul style="list-style-type: none"><li>➤ Designed, developed, tested and documented code for the migration of monolithic ETL processes into a continuously integrated DevSecOps pipeline based on RedHat's OpenShift.</li><li>➤ Implemented and improved coding standards' compliance, including PEP8, test coverage, security assessments and code complexity analysis.</li><li>➤ Designed and implemented the secrets-sharing strategy of all our applications with Hashicorp Vault.</li><li>➤ 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.</li><li>➤ Designed and implemented our monitoring strategy of all our applications with the use of New Relic.</li><li>➤ Our successful code builds required full PEP-8 compliance, unit test coverage (&gt; 80%), and cyclomatic complexity validations, all this while adhering to IBM's strict security standards.</li><li>➤ Presented local and company-wide training sessions in topics like automation, monitoring, security, containers, documentation and development best practices.</li><li>➤ Member of IBM's core Python team in Mexico, designing and presenting courses, conferences and hackatons.</li><li>➤ Co-authored an IBM Redbook (refer to the publications section).</li></ul> <div>Python OpenShift FastAPI GitHub Docker Pandas Travis CI Hashicorp Vault DB2 PostgreSQL RHEL Xenon Bandit New Relic LogDNA</div>
June 2018 November 2018	<b>Software engineering team lead, AMDOCS</b> <ul style="list-style-type: none"><li>➤ Led and mentored a development team across multiple geographies.</li><li>➤ Processed, analyzed and reported the data of a major telecommunications company.</li></ul> <div>Python Spark SQL ETL Cassandra Qlikview</div>
June 2014 June 2018	<b>Software engineer, IBM</b> <ul style="list-style-type: none"><li>➤ 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.</li></ul> <div>Python SQL ETL GitHub IBM Smart Cloud Cost Manager IBM Tivoli Usage and Accounting Manager DB2</div>
April 2013 June 2014	<b>System administrator, IBM</b> <ul style="list-style-type: none"><li>➤ 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.)</li></ul> <div>RHEL AIX Websphere Application Server Nagios</div>
September 2012 April 2013	<b>System administrator, ELECTRONIC ARTS</b> <ul style="list-style-type: none"><li>➤ 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.</li></ul> <div>Debian Python MySQL Nagios</div>
November 2007 September 2012	<b>Programmer analyst, AUTOZONE</b> <ul style="list-style-type: none"><li>➤ 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.</li><li>➤ Received two <i>WITTDJR (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."</li></ul> <div>PowerBuilder SQL C Java Perl Bash Jira MySQL Informix PostgreSQL</div>

## CERTIFICATIONS

CompTIA Linux+ LPIC-1	<b>Valid from:</b> Sept. 2016 <b>Verification code:</b> <a href="#">DQPR3E9HCDVE1WSN</a>
Google Analytics Individual Qualification	<b>Valid:</b> Sept. 2016 - Sept. 2021 <b>LPI ID:</b> LPI000368945 <b>Verification code:</b> <a href="#">pfbbjhavvj</a>
	<b>Valid:</b> Jan. 2018 - Jul. 2019

## LANGUAGES

English	●●●●●●
Spanish	●●●●●●
Japanese	●○○○○○

## STRENGTHS

- › Creative
- › Self-starter
- › Analytical
- › Responsible

## INTERESTS

- › Reading and writing
- › Space exploration
- › Sustainability and clean energy
- › Open Source advocacy

## COURSEWORK AND TRAINING

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

## PROJECTS

June 2016 October 2016	<b>Cognitive Concierge, IBM</b> <ul style="list-style-type: none"><li>› 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.</li><li>› A <u>fully-working demo</u> was presented publicly during the <i>World of Watson</i> conference in Las Vegas.</li></ul> <div>SoftBank Robotics' Nao and Pepper humanoid robots</div> <div>Watson</div> <div>Natural-language processing</div> <div>Speech recognition</div>
January 2016 March 2016	<b>Hadoop Raspberry Pi Cluster, IBM</b> <ul style="list-style-type: none"><li>› 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.</li><li>› Documented the entire process and published it on the <a href="#">IBM developerWorks site</a>.</li></ul> <div>HDFS</div> <div>Raspberry Pi</div>
2020 2021	<b>Gilbert (Educational open source mobile application), INDEPENDENT</b> <ul style="list-style-type: none"><li>› Built a <u>mobile application</u> aimed at helping college students to learn about electricity and magnetism.</li><li>› Documented and <u>published</u> the entire application as free and open source software.</li></ul> <div>Python</div> <div>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

### Building a Hadoop cluster with Raspberry Pi

<https://developer.ibm.com/recipes/tutorials/building-a-hadoop-cluster-with-raspberry-pi/>