

# ALAN VERDUGO

## Tech lead, software engineer

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## COMPETENCES

Programming	Python, FastAPI, PyTest, Shell scripting, JavaScript, NodeJS
Data analysis	Pandas, Matplotlib, Jupyter notebooks, Google Analytics
Databases	MySQL, DB2, PostgreSQL, MongoDB
Security	WhiteSource, Hashicorp Vault, AppScan on Cloud
Others	Docker, Git, Travis CI, GitHub Actions, OpenShift, Markdown, $\LaTeX$ , Jira, Agile methodologies

## PROFESSIONAL EXPERIENCE

November 2018 Present	<b>Tech lead, Software engineer, IBM</b> <ul style="list-style-type: none"><li>&gt; Led and mentored a team of 20 developers in order to build, maintain and improve applications which processed IBM's marketing data.</li><li>&gt; 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>&gt; Collaborated with leaders from other areas in order to review practices, share knowledge and learned lessons, and generally help each other in common goals.</li><li>&gt; Conducted interviews and selection of new team members, including managing their onboarding process to ensure they were ready to contribute to the team.</li><li>&gt; Designed and implemented the secrets-sharing strategy of all our applications with Hashicorp Vault.</li><li>&gt; 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>&gt; Designed and implemented our monitoring strategy of all our applications with New Relic.</li><li>&gt; Presented external and company-wide training sessions in topics like automation, monitoring, security, containers, documentation and development best practices.</li><li>&gt; Member of IBM's core Python team in Mexico, presenting courses, conferences and hackatons.</li><li>&gt; Co-authored two IBM Redbooks (refer to the publications section below).</li></ul> <div>PythonOpenShiftFastAPIGitHubDockerPandasTravis CIHashicorp VaultDB2PostgreSQLRHELJiraBanditNew RelicLogDNA</div>
June 2018 November 2018	<b>Software engineering team lead, AMDOCS</b> <ul style="list-style-type: none"><li>&gt; Led and mentored a development team across multiple geographies.</li><li>&gt; Processed, analyzed and reported the data of a major telecommunications company.</li></ul> <div>PythonSparkSQLETLCassandraQlikview</div>
June 2014 June 2018	<b>Software engineer, IBM</b> <ul style="list-style-type: none"><li>&gt; 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>PythonSQLETLGitHubIBM Smart Cloud Cost ManagerIBM Tivoli Usage and Accounting ManagerDB2</div>
April 2013 June 2014	<b>System administrator, IBM</b> <ul style="list-style-type: none"><li>&gt; 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>RHELAIXWebSphere Application ServerNagios</div>
September 2012 April 2013	<b>System administrator, ELECTRONIC ARTS</b> <ul style="list-style-type: none"><li>&gt; 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>DebianPythonMySQLNagios</div>
November 2007 September 2012	<b>Programmer analyst, AUTOZONE</b> <ul style="list-style-type: none"><li>&gt; 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>&gt; 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."</li></ul> <div>PowerBuilderSQLCJavaPerlBashJiraMySQLInformixPostgreSQL</div>

## CERTIFICATIONS

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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="#">pfbbjhavj</a>
	<b>Valid:</b> Jan. 2018 - Jul. 2019

## COURSEWORK AND TRAINING

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	Google	<a href="#">Data Engineering on Google Cloud Platform Specialization</a>
	IBM	<a href="#">Think like a hacker</a>
	IBM	<a href="#">IBM DevSecOps Explorer - Security and Automation for DevOps</a>
University of California at San Diego		<a href="#">Python for data science</a>
	IBM	<a href="#">Applied Data Science with Python</a>
	IBM	<a href="#">IBM Cloud Kubernetes Service</a>
	IBM	<a href="#">DevOps Essentials</a>
	IBM	<a href="#">Cybersecurity Threat Intelligence</a>
	IBM	<a href="#">Open Source Contributor</a>
	IBM	<a href="#">IBM Mentor</a>
	IBM	<a href="#">IBM Recognized Teacher/Educator</a>
	IBM	<a href="#">IBM Cloud Garage Test-Driven Development (TDD)</a>

## PROJECTS

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December 2021 June 2022	<b>Endurance mission, IBM</b> <ul style="list-style-type: none"><li>&gt; The <a href="#">Endurance CubeSat mission</a> is about making space accessible to everyone on this planet - In other words, democratizing access to Space. We leveraged IBM / RedHat technology to allow students worldwide to interact directly with a CubeSat in Low Earth Orbit - giving them the ability to use code to access data from various sensors, take pictures, perform calculations, and get the results back down to Earth via ground stations and the IBM Cloud.</li></ul> <div>Python Raspberry Pi 4 IBM Cloud</div>
2020 2021	<b>Gilbert (Educational open source mobile application), INDEPENDENT</b> <ul style="list-style-type: none"><li>&gt; Built a <a href="#">mobile application</a> aimed at helping college students to learn about electricity and magnetism.</li><li>&gt; Documented and <a href="#">published</a> the entire application as free and open source software.</li></ul> <div>Python Kivy</div>
June 2016 October 2016	<b>Cognitive Concierge, IBM</b> <ul style="list-style-type: none"><li>&gt; 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>&gt; A <a href="#">fully-working demo</a> was presented publicly during the <i>World of Watson</i> conference in Las Vegas.</li></ul> <div>SoftBank Robotics' Nao and Pepper humanoid robots Watson Natural-language processing Speech recognition</div>

## PUBLICATIONS

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### 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