

ALAN VERDUGO

Software engineer

@ factorpolar@gmail.com in [linkedin.com/in/alanverdugo](https://www.linkedin.com/in/alanverdugo) github.com/alanverdugo kippel.net

COMPETENCES

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|-------------------|---|
| 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

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| 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 (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

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| 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

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

PROJECTS

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| 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