# Alan VERDUGO

## Software engineer | Aspiring Data engineer

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## COMPETENCES

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|---|---|
| **Programming** | Python, Bash, Perl, PowerBuilder |
| **Databases** | MySQL, DB2, MongoDB, Oracle Database, Microsoft SQL Server, PostgreSQL |
| **Data analysis** | Pandas, Numpy, Matplotlib, Scikit-learn, Jupyter notebooks, Google Analytics, Watson Analytics |
| **Operating systems** | Linux (Redhat, Centos, Debian, Ubuntu Server), AIX, Windows |
| **Others** | JSON, XML, LaTeX , Git, Cron, Jira, CSV, VIM, Sublime, Agile Methodologies |

## PROFESSIONAL EXPERIENCE

**June 2014 – Present** — **Software engineer, IBM**

- Single-handedly collected, processed, curated and reported the entirety of billing data for IBM's Development Support Team. By enhancing existing code and developing new programs, I automated and improved the processes and increased the internal revenue of the team in thousands of dollars per month.
- Voluntarily participated actively in innovation projects in order to explore new areas of development, documenting insights and presenting results (Refer to the *Projects* section below).

Python | SQL | ETL | Git | Linux | AIX | IBM Smart Cloud Cost Manager | IBM Tivoli Usage and Accounting Manager | Bash | JSON | DB2 | XML | SQLite

**April 2013 – June 2014** — **System administrator, IBM**

- 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.)

Linux | AIX | Websphere Application Server | Nagios | Bash

**September 2012 – April 2013** — **System Administrator, ELECTRONIC ARTS**

- Launching, supporting, troubleshooting, enhancing and decommissioning thousands of servers and applications in the cloud used for videogame traffic and data processing for millions of concurrent users.

Linux | Python | MySQL | Nagios | Cacti | Chef | Perforce

**November 2007 – September 2012** — **Programmer analyst, AUTOZONE**

- 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.

PowerBuilder | SQL | C | Java | Perl | Bash | Javascript | Linux | AIX | Eclipse | Jira | Serena Dimensions | SVN | MySQL | DB2 | Informix | PostgreSQL | Oracle Database

## CERTIFICATIONS

CompTIA Linux+ — **Valid from:** September 2016 **Verification code:** DQPR3E9HCDVE1WSN

LPIC-1 — **Valid from:** September 2016 **Valid to:** September 2021 **LPI ID:** LPI000368945 **Verification code:** pfbbjhavvj

Google Analytics Individual Qualification — **Valid from:** January 2018 **Valid to:** July 2019

## LANGUAGES

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

## STRENGTHS

- Creative
- Self-starter
- Analytical
- Responsible

## INTERESTS

- Reading
- Writing
- Videogames
- Programming

## Projects

**January 2017 – October 2017** — Conferences' atendees live tracking and analysis, IBM

- In less than a month, our team built a proof of concept of a solution to the registration of attendees in technical conferences, while also providing mobile applications and an RFID tracking system used to identify the attendees' participation and movement around the event's venue.
- Used the captured data to gain insights and create a dashboard using the Watson Analytics platform.
- Created several reports and graphs by cleaning and processing the raw data using Pandas and plotting with Matplotlib.
- A fully-working demo was tested and presented to IBM global leadership during the Interconnect conference in Las Vegas.
- The system was again implemented during several week-long training sessions in WeWork in Philadelphia.

Watson Analytics | Python | Pandas | Matplotlib | MySQL | ETL | RFID | Linux | CSV | SQLite

**June 2016 – October 2016** — Cognitive Concierge, IBM

- By using IBM's Watson, 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 the conference.
- A fully-working demo was tested and presented to the general public during the World of Watson conference in Las Vegas.

SoftBank Robotics' Nao and Pepper humanoid robots | Watson | Natural-language processing | Speech recognition | Text-to-speech | Speech-to-text | Linux | MySQL | Bluemix

**January 2016 – March 2016** — Hadoop Raspberry Pi Cluster, IBM

- I researched, analyzed and built a prototype to demonstrate the feasibility of using Raspberries as an affordable cloud offering to entry-level clients.
- I built a fully-working 12-node Hadoop cluster with Raspberry Pies including setting up the environment in each node, testing it and providing a demo to high management.
- Documented the entire process and, for benefit of the community, wrote a tutorial on how to accomplish what was done. Said guide was published on the IBM developerWorks site.

Hadoop | HDFS | Raspbian | Raspberry Pi | SSH

**August 2016 – April 2018** — Travel searcher, Independent

- By gathering and analyzing Google's travel data, I built a wrapper and notification system to inform me of affordable flights for destinations, prices and schedules I decided.
- Published all the code and documentation in my github repository.

Python | Google QPX API | Linux | Cron | Git

## Coursework and training

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| Rice University | *Interactive programming in Python* |
| Stanford | *Introduction to mathematical thinking* |
| IBM | *Hadoop foundations* |
| IBM | *Spark foundations* |
| IBM | *Watson analytics* |
| MongoDB, Inc. | *MongoDB for developers* |
| Wizeline | *DevOps crash course* |
| University of California at San Diego | *Python for data science* |
| Wizeline | *Portable Stream and Batch Processing with Apache Beam* |
| IBM | *Blockchain essentials* |
| IBM | *Big data foundations* |
| IBM | *Bluemix essentials* |
| Google | *Google analytics for beginners* |
| Google | *Advanced Google analytics* |
| Wizeline | *Spatial Data Science: Algorithms and Applications by Rappi* |