

# ALAN VERDUGO

## Senior software engineer

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github.com/alanverdugo

kippel.net

## COMPETENCES

Programming	Python, FastAPI, PyTest, Shell scripting,
Data analysis	Pandas, Databricks, Matplotlib, Jupyter, Oracle Analytics Cloud, Oracle Business Intelligence
Databases	MySQL, DB2, PostgreSQL, MongoDB, SQLite
Others	Docker, Git, Travis CI, Sonarqube, GitHub Actions, OpenShift, AWS Lambda, AWS Glue, AWS ECS, S3, CloudWatch, Datadog, Jira, Agile methodologies

## PROFESSIONAL EXPERIENCE

July 2024 Current date	<b>Senior software engineer, ORACLE</b> <ul style="list-style-type: none"><li>&gt; Creation and maintenance of data visualizations and dashboards for Oracle Support.</li></ul> <div>PythonPandasAPEX (Oracle Application Express)Oracle Analytics CloudOracle Business Intelligence</div>
March 2023 July 2024	<b>Senior software engineer, MERCADO LIBRE</b> <ul style="list-style-type: none"><li>&gt; Founding member of a validation platform for a ML-powered chatbot which handles hundreds of thousands of interactions daily for the leading eCommerce site in Latin America.</li><li>&gt; Implemented new features, including initial design, prototyping, coding, deployment and maintenance.</li><li>&gt; Served as Security Guardian. Keeping track of potential security issues in our applications.</li></ul> <div>PythonFlaskGitHub ActionsDockerPandasMySQLPytestPoetryJiraKibanaDatadogNoSQL</div>
November 2018 March 2023	<b>Senior software engineer, IBM</b> <ul style="list-style-type: none"><li>&gt; Developed Python code to automate the consumption, processing and reporting of customer-related data in order to generate NPS insights.</li><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; Managed data in a wide range of formats, from diverse and fluctuant sources.</li><li>&gt; Analyzed and documented over 30 legacy ETL processes running in DataStage. Designed and implemented their Python 3 replacements.</li><li>&gt; Designed and implemented REST APIs for customer's data transmission.</li><li>&gt; Monitored batch processes to protect data flows. Provided root cause analysis and fixes in case of failures.</li><li>&gt; By implementing CI/CD validations, incremented the team's throughput and reduced error rates.</li><li>&gt; Presented external and internal training sessions in topics like automation, monitoring, security, containers, documentation and development best practices.</li></ul> <div>PythonFastAPIGitHubDockerPandasTravis CIHashicorp VaultDB2PostgreSQLS3 cloud storagePyTest</div>
June 2018 November 2018	<b>Software engineer, AMDOCS</b> <ul style="list-style-type: none"><li>&gt; Led and mentored a Python software development team across multiple geographies.</li><li>&gt; Processed, analyzed and reported the data of a major telecommunications company.</li></ul> <div>PythonSparkSQLETLCCassandraQlikview</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.</li><li>&gt; Automated manual processes and increased the revenue of the team in thousands of dollars per month by enhancing existing code and developing new programs.</li></ul> <div>PythonSQLETLGitHubIBM Smart Cloud Cost ManagerIBM Tivoli Usage and Accounting ManagerDB2</div>
April 2013 June 2014	<b>AIX/Linux system administrator, IBM</b> <ul style="list-style-type: none"><li>&gt; Deployed, configured, maintained and migrated IBM production applications and servers.</li><li>&gt; Specialized in the Unix platform and its variants (GNU/Linux, AIX, etc.)</li></ul> <div>RHELAIKWebSphere Application ServerNagios</div>
September 2012 April 2013	<b>Linux system administrator, ELECTRONIC ARTS</b> <ul style="list-style-type: none"><li>&gt; Deployed, maintained and updated thousands of servers in the cloud, used for videogame traffic and data processing for millions of concurrent users.</li></ul> <div>DebianPythonMySQLNagios</div>

November 2007  
September 2012

### Programmer analyst, AUTOZONE

- Troubleshooting, debugging, maintaining, developing and enhancing systems in a production environment for a retail Fortune 500 company.
- Received two *WITTDJR (What it takes to do the job right)* awards for delivering an excellent customer service and one *Extra Miller* award for "going above and beyond the call of duty, exceeding expectations and consistently doing more than expected."

PowerBuilder SQL C Java Perl Bash Jira MySQL Informix PostgreSQL

## © PATENTS

### Authentication with infrared light for digital keys

Patent ID: US20240275485A1

### Continuous user's IoT devices sensing for unusual authenticity detection on computer devices

Patent approved. Currently being processed by the United States Patent and Trademark Office.

## ✎ PUBLICATIONS

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

ISBN-13: 9780738458564.

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

ISBN-13: 9780738459561. ISBN-10: 0738459569.

## ⚙ CERTIFICATIONS

CompTIA Linux+  
LPIC-1

**Valid from:** Sept. 2016 **Verification code:** DQPR3E9HCDVE1WSN

**Valid:** Sept. 2016 - Sept. 2021 **LPI ID:** LPI000368945 **Verification code:** pfbbjhavj

## 🎓 RELEVANT COURSEWORK AND TRAINING

O'Reilly	<u>Data Engineering with Python and AWS Lambda</u>
AWS	<u>AWS Knowledge: Cloud Essentials</u>
Coursera - Google	<u>Data engineering on Google Cloud Platform specialization</u>
IBM	<u>Security focal</u>
IBM	<u>IBM DevSecOps explorer - Security and automation for DevOps</u>
MongoDB, Inc.	<u>MongoDB for developers</u>
IBM	<u>Spark foundations</u>
EDX - UC San Diego	<u>Python for data science</u>
IBM	<u>Applied data science with Python</u>
IBM	<u>IBM Cloud Kubernetes Service</u>
IBM	<u>DevSecOps essentials</u>
IBM	<u>Cyber-security threat intelligence</u>
IBM	<u>IBM Cloud Private - Continuous Integration/Continuous Delivery pipelines</u>
IBM	<u>Data visualization using Python</u>

## 🔧 PROJECTS

December 2021  
June 2022

### Endurance mission, IBM

- Wrote code for the Endurance mission, allowing students to use our CubeSat in Low Earth Orbit, so they could get sensors' data, take pictures, and download the data to Earth via ground stations.

Python Raspberry Pi 4 IBM Cloud

June 2016  
October 2016

### Cognitive Concierge, IBM

- 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.
- A fully-working demo was presented publicly during the *World of Watson* conference in Las Vegas.

SoftBank Robotics' Nao and Pepper humanoid robots Watson Natural-language processing Speech recognition