

**Top Skills**

- Python
- REST APIs
- Test Automation

**Certifications**

- Neural Networks and Deep Learning
- Using Python for Automation
- Introduction to computing in Python
- AI for Fintech

**Honors-Awards**

- Ayacucho Educational grant for graduate studies
- Best paper award on Cisco Test Conference

**Patents**

- Extended multi-line hunt group communication

**Other Skills**

- CI/CD
- Microservices
- Docker
- Kubernetes
- Amazon Web Services (AWS)
- Git
- Jenkins
- Bash scripting
- Selenium
- Linux
- TCP/IP
- Troubleshooting
- Networking
- Virtualization
- Kafka
- Machine Learning
- Payments and Billing
- Video Streaming
- Voice over IP
- HTML/CSS/JavaScript

**Personal Skills**

- Curious
- Thorough
- Creative
- Passionate for quality
- Always willing to learn new technologies
- Able to mentor junior team members
- Ability to work both independently and in a team environment.

**Languages**

- English (Bilingual)
- Spanish (Native)

**Summary**

Senior Software Engineer in Test (SDET) with more than 20+ of experience in payments, video streaming and voice over IP industries.

**Work Experience**

**Roku**, San Jose, CA (2017 – Present)

**Sr. Software Engineer, Test**

- Developed hundreds of automated Python scripts for REST API backend testing for Roku Pay system with 100% automation using Unittest extended framework and Pytest.
- Contributed to the design and maintenance of automated frameworks and tools.
- Worked in teams migrating from monolith backend to micro services architecture with over 50+ micro services.
- Paired with software engineers to identify and prevent gaps with automation coverage.
- Debugged issues with the code using logs from Kibana and filed more than 600 bugs in Jira tool.
- Contributed to development of CI/CD framework with Jenkins, Gitlab, Terraform, Linux, Bash scripts and Amazon Web Services (AWS).
- Developed code using OOP and used SQL queries for database verifications.
- Executed performance testing using Locust tool and analyzed throughput and 95th percentile response times.

**Cisco Systems**, San Jose, CA and Boulder, CO (2004 – 2017)

**Sr. Lead Software/QA Engineer**

- Automated configuration for Live, VOD and Cloud DVR based on HTTP adaptive bitrate streaming technologies using Python scripts that called REST APIs with JSON bodies.
- Worked in multiple projects ranging from IP PBX, IP phones, Tablets and video streaming.

**Carrier Access**, Boulder, CO (2001 – 2004)

**Sr Test Engineer, VoIP test lead**

- Performed system test for VoIP line access gateway controlled by a Call Agent using MGCP or SIP.

**US West Advanced Technologies**, Boulder, CO (1998 - 2000)

**Systems Engineer**

- Selected, installed, configured and tested VoIP gateways (Cisco and Lucent) for Voice Messaging transport over packet networks including trunks and SMDI link. Worked with VoIP gateway vendors to solve problems during the proof of concept period.

**Additional Professional activities**

- Co-founder of 2 companies where I coded for mobile apps and web sites.
- Internships as a web master and hardware/assembly code engineer.
- Side projects in machine learning, mobile apps and web applications.
- Roles as a system engineer and architect in voice over IP industries.

**Education****• Stanford University**

Certificate, Computer Networking (2004 - 2006)

**• University Colorado - Boulder (1996 - 1998)**

MS, Telecommunications

**• Universidad Simon Bolivar**

BS, Electronics Engineering, (1989 – 1994)

**More about me**

- **LinkedIn:** <https://www.linkedin.com/in/alejandro-avella-26a0364/>
- **GitHub:** <https://github.com/aavella77>
- **Blog:** <https://aavella77.github.io/>