CARLOS ALBERTO VILLA HERRERA

Full-Stack AI Engineer | AI Agents & LLM Applications | Python & AWS

Chihuahua, Mexico | +52 614 183 7420 | carlosavillah90@gmail.com
carlosvilla.dev | linkedin.com/in/carlosvilla90

PROFESSIONAL SUMMARY

Full-Stack AI Engineer with 2+ years of experience building and supporting AI applications. Currently focused on agentic workflows, LLM integrations, and backend automation using n8n, Python, TypeScript, and REST APIs. Also experienced in production computer vision systems, AWS infrastructure, deployment, testing, and troubleshooting.

TECHNICAL SKILLS

AI & automation: AI agents, LLM orchestration, n8n, Gemini/OpenAI APIs, information extraction, prompt workflows, human-in-the-loop review.

Development: Python, JavaScript/TypeScript, Node.js, REST APIs, webhooks, SQL/PostgreSQL, React.

Cloud & delivery: AWS Lambda, EC2, S3, SQS, DynamoDB, CloudWatch, IAM; Terraform, Docker, Git, GitHub Actions, CI/CD, pytest.

Computer vision: YOLO, ONNX Runtime, OpenCV, PaddleOCR; video analytics and OCR.

PROFESSIONAL EXPERIENCE

Creai | Full-Stack AI Engineer | Oct 2024 - Present | Mexico

- Develop agentic n8n workflows using Python and JavaScript/TypeScript, connecting LLM providers, communication platforms, and internal systems through REST APIs.
- Build information extraction, transcription, and assessment workflows with structured output validation, traceable evidence, provider fallbacks, and human review.
- Create idempotent Python tools and API integrations for data provisioning and reconciliation, including dry-run safeguards and documented contracts.
- Support production computer vision services for video analytics, vehicle tracking, and OCR; investigate failures, improve data handling, and add regression tests.
- Maintain Python services and AWS infrastructure with Terraform, Docker, and GitHub Actions across development, staging, and production.
- Collaborate on architecture and requirements; review pull requests, document integrations, mentor teammates, and present client demos.

Universidad Autónoma de Chihuahua | English Programs Coordinator / Professor

Coordinator: Jan 2023 - Present | Professor: Aug 2015 - Present | Chihuahua, Mexico

- Coordinate academic programs, faculty, and technology adoption; teach English and programming-related courses and develop Moodle learning materials.

The University of Texas at El Paso | Graduate Research & Teaching Assistant

Sep 2018 - Dec 2020 | El Paso, TX

- Supported research through data collection, database management, statistical analysis, documentation, and instruction.

EDUCATION

B.S. Software Engineering, Universidad Autónoma de Chihuahua | In progress, expected 2028

M.A. Political Science, University of Texas at El Paso | 2020

M.A. Administration, Universidad Autónoma de Chihuahua | 2016

B.A. Government Administration, Universidad Autónoma de Chihuahua | 2013

CERTIFICATIONS & LANGUAGES

CS50 Computer Science for AI; CS50 Web Programming with Python and JavaScript; Computer Science for Cybersecurity; Introduction to Cybersecurity. Languages: English and Spanish (bilingual).