Jayper Sanchez
Solutions Architect | AI Integrator | Machine Learning | Web3 Innovator | Serial Builder
Mississauga, Ontario, Canada

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Professional Summary

A seasoned professional with over 20 years of experience in software development and architecture, adept at building scalable, impactful software solutions. Expert in full-stack development, data engineering, and blockchain technologies, with a passion for software solution and design, tailored to solve complex challenges. A self-proclaimed "Serial Builder," continually learning and innovating through experimentation and development.

Technical Skills

- **Solution Architecture Skills:** Enterprise Solution Design, Technical Roadmaps, Microservices Architecture, System Integration, OpenBB SDK.
- **Programming Languages:** Python, Java, JavaScript, SQL, C++, Solidity, Websockets
- **Frameworks and Platforms:** Spring Boot, Node.js, J2EE, React, Angular.
- **Databases:** PostgreSQL, MongoDB, Oracle, MySQL, MSSQL.
- **Cloud Platforms:** AWS (S3, EC2), Azure, GCP (BigQuery, Compute Engine), SAP BTP.
- **Big Data & Reporting Tools:** Apache Spark, Hadoop, JasperReports.
- **DevOps Tools:** Docker, Kubernetes, Jenkins, Git, CI/CD, Apache Tomcat, NGINX
- **Blockchain Technologies:** Blockchain, Smart Contracts, Solidity, DeFi with Uniswap, 1Intch, HardHat,EVM, Ethereum
- **AI and Agentic AI**: ElizaOS for AI Agents, OpenAI, DeepSeek and Gemini.
- **Payment Systems**: Paypal API and Stripe

Professional Experience

Virlan Chainworks
Full Stack Engineer
January 2018 – Present

- **Architected and implemented AI-powered applications** including semantic job-talent match engines and Agentic AI assistants (ElizaOS, Ardent) for recruiting and productivity workflows.
- Built AI services using **Python, Flask, sentence-transformers**, and **PostgreSQL-backed vector databases** to support semantic search and generative Q&A on user documents and job data.
- Designed and deployed **LLM fine-tuning pipelines** using HuggingFace Transformers, enabling domain-specific Q&A and document understanding features.
- Delivered **Generative AI applications** like:
    - An **AI resume and cover letter generator** tailored to job descriptions.
    - An **AI agent for freelancer platforms** that reads job posts and autonomously generates proposals.
- Integrated **OpenAI, DeepSeek, and Gemini APIs** for advanced language generation, retrieval augmentation, and custom bot conversations.
- Created **agent-based crypto trading bot** combining AI signal analysis with KuCoin API and OpenBB SDK for market research.
- Led **federated AI and sovereign privacy project (NOVA)** to deliver SaaS-ready, local LLM services for businesses with strict data compliance needs.
- Developed AI-driven dashboards and admin tools using **Tkinter and Python** to streamline data audits and customer support.
- Advised C-level management on AI infrastructure strategy and cost optimization for GPU scaling and vector DB usage.
- Created a private Ethereum fork for **Shyft.Network**, deploying ERC20 token, EVM node (Geth), and IPFS-integrated custom ENS registry.

AI & Machine Learning Projects

ScoutJar AI Matching System
Built a semantic matching engine for job/talent search using embeddings and NLP filters. Supported active and passive profile modes with fine-tuned match thresholds and AI-enhanced scoring.

Resume & Proposal Generator (LooKK AI)
Developed generative AI tools for talents and freelancers to automatically craft resumes, cover letters, and outreach proposals tailored to job descriptions.

Ardent Agent (Agentic AI)
Implemented a memory-based AI agent capable of task management, contextual reminders, and federated learning, integrated with ElizaOS for modular orchestration.

Legal AI Assistant (SCP Protocol)
 Scraped global legal data, embedded statutes, and built a Q&A layer on top of vectorized legal chunks. Enabled natural language interface for enforcement and cross-jurisdiction lookup tools.

Amihan Solution
Software Architect & Senior Fullstack Developer
July 2024 – December 2024

- Integrated SuccessFactors data with external application
- Led R&D projects, designing innovative software solutions for SAP SuccessFactors and SAP BTP ecosystems.
- Managed deployed applications on BTP Cockpit using Foundry
- Spearheaded the development of enterprise-grade solutions, ensuring high performance and scalability using Agile Sprint methodology and other projects using SDLC.
- Designed the database structures that stored SuccessFactors data into PostGresql.

JobDeal
Interim Chief Technology Officer
October 2022 – October 2024

- Directed the design and implementation of distributed systems for a matchmaking platform.
- Designed the database for the application in Postgresql.
- Created roadmaps leading to an MVP release, integrating advanced cloud and database technologies.
- Integrated ElizaOS for the platform's Agentic AI Agent.

Shyft Network
Fullstack MERN Developer
September 2018 – September 2020

- Developed decentralized applications and tokens for DeFi platforms.
- Created the SHFT ERC20 token in Solidity
- Integrated APIs with smart contracts to enable seamless Web3 interactions.

BC Ferries
Business Intelligence Jasper Reports Developer
September 2018 – December 2019

- Built and optimized SQL queries for fleet-wide reporting using Jasper Reports.
- Streamlined ETL processes using Oracle and Hadoop for offline data processing.

Fujitsu Global
Senior Technical Consultant
March 2015 – March 2017

- Developed scalable microservices using Spring Boot and Oracle databases.
- Automated ETL processes using Microsoft SSIS for enhanced data integration.
- Created reports using Jasper Reports.

SaskPower
Enterprise Mobile Developer Consultant
September 2012 – February 2015

- Designed mobile applications for internal operations, integrating with SAP systems with React Native
- Built responsive web applications using SAPUI5.

Research In Motion (BlackBerry)
Mobile Developer Consultant
August 2011 – September 2012

- Created enterprise applications for BlackBerry smartphones and tablets with Javascript and C++ for the Blackberry Playbook.
- Developed tools for enterprise resource management and RESTful APIs.

eSupplyLink
J2ME Developer Consultant
May 2010 – June 2011

- Designed inventory management systems integrating barcode scanners with database systems with J2ME.
- Developed Swing client applications and Java J2EE solutions for shipping and receiving workflows.

DHS Government of Florida
Intersystems Cache Developer Consultant
December 2009 – January 2010

- Built ETL pipelines to enhance public health data reporting during the R1N1 outbreak.

Quest Diagnostics
MUMPS/Cache Programmer Analyst
June 2007 – November 2009

- Created comprehensive diagnostic reports and ETL workflows to enhance operational efficiency.

Golden1 Credit Union
MUMPS/Cache Programmer Analyst
January 2004 – May 2007

- Developed backend systems for banking operations, enhancing nightly data processing.

DST Output
Lead Java Developer
November 1999 – December 2003

- Developed internal applications with Java and Oracle, creating ETL pipelines for manufacturing data reporting.
- Developed custom internal reporting application with Java Swing.

Certifications

- Databricks Certified Data Engineer Associate Badge
- Blockchain Smart Contract Developer Certification
- SQL Essential Training
- SAP Associate Certificate

Education

- **Certificate in HCIT Implementation Support Specialist, EHR Systems** – Cosumnes River College (2006)
- **Associate's Degree in Computer Programming & Systems Analysis** – CompuCollege School of Business (1998)