Curriculum for Avi Alkalay

I was born in 1973, I'm married, I have 2 children and I live in São Paulo. My phone number is +55-11-99659-9059. I have a blog, LinkedIn and FaceBook pages where I write many multidisciplinary articles.

Objectives

I look for opportunities in:

1. **Digital Transformation.** Lead projects on an enterprise to more efficiently communicate with its clients and partners through integrated mobile and web platforms, artificial intelligence and insights from data.
2. **Cloud Application and Infrastructure Engineer.** Application architect, infrastructure architect, business transformation through IT. Either in IT sales with client relationship or as an internal architect.

Professional Experience

I work at **IBM Brazil** since 1997. My last roles were **Cloud Advisor** and **Cloud Adoption Leader** which is a kind of executive architect that works directly with clients in all aspects of their cloud initiatives: architect better apps for the cloud, handle security in the cloud, architect blockchain and distributed apps, use new and more efficient types of storage, advise on private × hybrid × public cloud strategies and design a transition plan, help on a DevOps adoption and cultural shift and finally mobile and web application architectures. Throughout these years, I had the opportunity to work with many high profile enterprises and large and strategic projects, but also startups, partners and community of developers. To cite some: **Hyundai**, **Avon**, **Toyota**, **Sulamerica**, **Mapfre**, **Serasa Experian**, **Câmara Interbancária de Pagamentos**, **Itaú**, **Santander**, **TecBan**, **Ford**, **AmBev**, **XP Investimentos**, **Petrobras**, **Embraer**, **Natura**, **Dataprev**, and many others.

My chronological employment history can be seen in my LinkedIn page.

Relevant Projects

Telefonica Cloud Adoption Journey

Assigned as IBM Cloud Advisor for **Telefonica**, I worked closely with client's dev and ops chief architects to define a company-wide Cloud adoption journey. Concepts as Bimodal IT, DevOps, Software-defined Infrastructure were connected together in what became Telefonica's official Cloud blueprint. I was also resposible to orchestrate diverse IBM brands and products adherence to client's blueprint. This relationship culminated in sales of multiple IBM Cloud products to Telefonica.

Thingable migration to Cloud

As a Cloud Advisor, I worked with the CEO, CTO and full-stack developers of a startup called **Concert/Thingable**. Their mature C++—written SCADA would receive a new web layer of functions and be turned into a SaaS world class consumer platform for IoT. I helped them embrace 12-factor app concepts and rethink their build systems to have as much as possible of an automated delivery pipeline. I also advised on social/OAuth/SSO authentication, how to handle app level single versus multi-tenancy on the cloud, what components should exist on CloudFoundry runtimes, external services and what should go to containers. We created together, from scratch, practical scripts, Dockerfiles and Makefiles that do what they needed. Relationship with Thingable went from project concept until after they stablished themselves as a big and stable IBM Cloud client.

Casas Bahia migration to Linux with DevOps

Retailer **Casas Bahia** runs thousands of point of sales machines spread across the country. Their home-gown COBOL software runs on DOS at that time. They wanted to convert them to Linux. In a true dev+ops environment, I made that conversion for them, starting from reorganizing the code, fixing their build system, RPM-packaging the app and dependencies, patching and porting app from DOS to Linux, creating an unattended distributed installation system. This was probably the first DevOps project that happened in Brazil about 15 years before the "DevOps" name was even invented. It was well known in the press, it earned me some prizes and enabled IBM to sell thousands of PoS machines.

Computational Fluid Dynamics experiment between Vale and IBM Research using BlueGene Top500 super computer

Objective was to help **Vale/VSE** to simulate their ethanol turbine designs on OpenFOAM software running on BlueGene. I worked in site with IBM Watson Research Center Yorktown scientists and with Vale scientists "translating" between engineering needs and IT results. I ran Vale models on BlueGene executing optimizations on compilers, filesystems and network. Collected engineering results and reported graphical insights to the client. I also ported OpenFOAM software to BlueGene, handled cross-compilers, patches, RPM-packaging and documentation of porting process. I also worked in similar HPC, but much less intensive projects, with Petrobras and Embraer.

Education and Languages

- Information and **Computer Sciences** at Universidade Estadual Paulista (**UNESP**), Campus of Rio Claro — 1991 to 1994
- I speak, read and also write articles fluently in **English** and **Spanish**. I speak Hebrew. Portuguese is my native language.

Other hard and soft skills

- I am an experienced presenter and lecturer, I drive presentations with story-telling flows, I produce my own graphical slides.
- Full-stack application development
- Open Source ecosystem and economy
- Programing languages: C++, Python, PHP, Perl, Java
- HTML5, CSS, DOM, JavaScript
- Linux/Unix Shell scripting with AWK, SED etc
- Data engineering
- Advanced SQL, MariaDB, SQLite, PostgreSQL, ETL
- Linux and Unix including kernel manipulation
- HTTP, REST, Web Services, MQTT
- Docker
- Kubernetes
- Parallel and high performance computing (HPC)
- Mobility, iOS, Android including development
- Advanced WordPress
- Advanced Drupal
- Django
- Multimedia, FFMpeg, streaming, MPEG-4, audio and video compression
- DevOps, delivery pipelines, software packaging
- Cryptography, SSH, digital signatures and certificates, HTTPS
- Firewalls, VLANs, IPv6, DHCP, DNS/Bind
- VMware, KVM, general para-virtualization
- OpenStack, CloudFoundry, OpenShift
- Crypto-currencies and their global economic dynamic