

ROBERTO CARRILLO

Software Engineer - Milpitas, CA

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Expert in API design, *distributed systems*, containerized and serverless, automation.

Strong *analytical* skills for solving complex, multi-layered problems in software engineering.

Ability to quickly become proficient with *any set of technologies*.

'No task is too small' mindset.

Proficient in *GoLang*, Python, Web stack, C-family of languages. *Cloud* technologies, Linux, etc.

Proven communication skills, technical leadership, technical interviewing.

Professional Experience

Software Engineer at *Google*, 2014 - Present

- Developed several **microservices** on the **continuous integration** ecosystem used in the development of Chromium, Fuschia, and many other Google **open source** projects, including build verification, test result storage and analysis, **regression culprit** identification.
- Developed application for **auditing** code repository change **logs** for policy **compliance** across source control, issue tracking, code review and continuous integration systems.
- Implemented monitoring and alerting on Google **infrastructure** for several internal applications.
- Upgraded code across dependent systems continually to support new feature sets and several technology migrations and re-writes.

Systems Engineer at *Amazon Web Services*, Seattle, WA, 2013-2014

- Replaced an outdated set of operational tools for Cloud Formation that was not compliant with network security requirements. Made it compliant and configurable for deployment into air-gapped data centers.
- Produced a set of **diagnostic tools** to determine **customer impact** in **real-time** when our dependencies had service disruptions. These tools work by monitoring workflow execution and aggregating them dynamically to produce graphs, detailed listings and notifications upon service threshold breaching.

Senior Operations Engineer at *DPS Health/Beora Technologies*, Los Angeles, CA & Monterrey, Mexico, 2011-2013

- **Maintained** operation of legacy web applications (VB .NET, IIS) by writing **security** and **compliance** updates and **back-porting** essential features of the newer versions.
- Designed and Implemented **content authoring tools** to **transpile** custom markdown into html and css.
- Wrote tools for **automating** operation (deployment, testing, monitoring), customer support and reporting tasks.
- Implemented new features across several independent versions of online behavior change applications (C# and VB.NET)

- Evaluated the feasibility, planned and oversaw the **migration** of our services from dedicated hardware to virtual machines.

Head of IT at *Diario de Quintana Roo*, Chetumal, México 2009–2010

- Produced **automation** for **image processing** using Python Imaging Library
- **Automated** the reception of news from agencies using web scraping techniques via Python mechanize.

Director of IT and Operations at *Secretaría de Seguridad Pública del Estado de Quintana Roo*, Chetumal, México 2008 – 2009

- Oversaw the setup of data links between several offices.
- Oversaw **compliance** with federal policies for **data security**.
- **Trained personnel** and **oversaw** data entry and acquisition for the State's data on national databases related to public security.

Software Design Engineer in Test at *Microsoft*, Redmond, WA 2006–2007

- Produced **automation** to **test** features such as High-Availability, warm fail-over and component deployment on a hosted crm application (MS CRM Live).
- Served as liaison with datacenter operations.

Logistics Software Analyst at *Cemex*, Monterrey, Mexico, 2005–2006

- Designed a system for **automatic scheduling** of bulk cement shipments based on genetic algorithms and simulated annealing.
- **Ported** legacy monolithic ad hoc-built shipment-scheduling application in Microsoft ASP into a model-view-controller **architecture** using Java Struts.

Intern Software Design Engineer in Test at *Microsoft*, Redmond, WA, 2004

- Wrote a **framework and a set of tools for automating the testing** of the User Interface for the ActiveSync version that shipped with Windows Mobile 5 on both the PocketPC and Phone versions.