# Mayel Espino

## Skill Set

### Languages

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| --- | --- |
| **C** | Back end servers - Device driver to control tape drive - Embedded systems. Massive file processing - image processing libraries - Command line utilities. |
| **C++** | Large-scale Back-end servers - Massive file processors for credit card |
| **Python** | Command line utility - Server development - Messaging/middleware systems- Monitoring tools. |
| **Bash Scripting** | Administrative task automation- Environment set up and management -  System Monitoring. |
| **Django/flask** | REST server - Command Line REST client - In-house application for storing. service monitor data for reporting engine - Reporting engine. |
| **Novice level** |  |
| **Assembler** | Embedded systems in college. |
| **Perl** | Unix process management - Service monitoring - File processing. |
| **Recently learned** |  |
| **Go lang, Swift, Objective-c, Ruby,LUA.** | |

### Infrastructure engineering

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| --- | --- |
| **Configuration management and Automation** | Developed and improved on a variety of tools, both in house and off the shelf, to enable the Release Engineering team deploy, configure and manage the entire company's software stack. |
| **Cloud computing** | Provisioned and managed nodes in both AWS and OpenStack. Created and managed security groups. Used the web interfaces and command line tools for both. |
| **Chef, Salt, Ansible** | Wrote chef recipes, chef kitchen tests, used kitchen knife for chef server operations and node management. |
| **Puppet** | Received training from Puppet developers - Developed puppet modules - Tutorial examples - puppet master - Mcollective. |
| **Haproxy and Squid** | Manage, update haproxy. Created Chef recipes to produce the haproxy configuration. |
| **Consul** | Added service discovery to haproxy. |
| **DataDog** | Created DD agent scripts to monitor services, also created dashboards and alerts. |
| **Continuous integration** | Jenkins, Hudson: Created continuous integration jobs, code coverage jobs, Maven test execution jobs. |
| **Source control** | Used GIT, SVN, for source control of work projects. |

### Databases

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| **Mysql** | Installation, schema design and performance tuning. |
| **Oracle/Sybase** | Schema design and performance tuning. |
| **SQL/PSQL** | Report generation - PSQL programs for data pre-processing. |
| **Mongo DB** | MongoDB to describe our deployment application's configuration data. |
| **Recently learned** |  |
| Cassandra, Hadoop. | |

### Operating systems

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| --- | --- |
| **Linux** | Install and developed open source and in-house applications - Systems Administration and management - Process and service monitoring. |
| **Unix** | Systems Administration and management - Process and service monitoring - Ported C/C++ code on to various variations of Unix. |
| **MVS** | Applications C, REX, and proprietary languages. |
| **Windows** | Software Development and management. |

### Web

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| --- | --- |
| **HTML** | Developed a variety of web pages for internal tools. |
| **PHP** | Developed in-house applications for MCI test tool. |
| **JavaScript** | Developed Service monitor web page using JavaScript to read files and execute REST commands to dynamically build the status web page. |
| **Mark up languages** | XML ,JSON & YAML, used for configuration data. |

### Middleware

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| --- | --- |
| **MQ Series** | Developed, maintained and ported code for messaging applications, which utilized MQ-Series API. |
| **WebSphere** | Developed messaging applications for complex messaging and message transformation. |
| **Tuxedo** | Developed business logic for tuxedo servers, using tuxedo's API. |

### Other skills

|  |  |
| --- | --- |
| **Management** | Lead large teams, up to 9 engineers, in design and project tracking meetings. Day to day mentoring and project tracking. |
| **Embedded Systems** | Developed Embedded systems programs for college. |
| **Internet security (AppScan)** | Maintained and extended in house infrastructure for scanning PayPal's site for internet security vulnerabilities. The infrastructure was built around AppScan an IBM product. |

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## Professional Experience

### Microsoft

**February 2018 to present** | Santa Clara, California

Fleet Process Engineering Team: To delight customers in a Cloud First world, Microsoft delivers highly available online services with cutting edge features and innovative functionality lighting up on a regular basis. Quality of service (QoS) is paramount as we continue to make deep investment in Microsoft Azure and its expanding customer base who rely on our services to run their diverse businesses. Availability, reliability, and performance are all key differentiators that customers demand and expect in cloud services when choosing a provider.

C# - Go

### Apple Inc.

**April 2016 to December 2017** | Santa Clara, California

AST2 Infrastructure Engineering Team: As part of the team I helped managed and maintain a large infrastructure to serve field diagnostic applications for Apple world wide. Highly available, multi-site. **Release Management** Deployed code to production and non-production environments. Help coordinate the use of the non-production environments with multiple development teams. **Triage** Managed ticket queue. Assigned tickets to developers and other team members. Help Development team in debugging and root cause analysis. **Crisis Management** Participated in the on-call rotation for High priority tickets.

saltstack - python - bash scripting - Ansible - Cassandra - Hadoop

### FireEye

**October 2015 to April 2016** | Milpitas, California

FELabs Infrastructure DevOps Team: Development of automated tools for monitoring, management and deployment of horizontaly-scaled, highly-available cloud systems. Architecting multi-datacenter monitoring facilities. Building performance and reliability metrics in a dynamic application environment. Integrate with engineering teams to provide expertise and requirements.

Ansible, Prometheus, ELK Stack, Docker, Python.

### Ooyala

**March 2015 to August 2015** | Santa Clara California

Site Reliability Engineering (and Infrastructure) Team: Researching, selecting and extending the right frameworks, tools and technologies for Ooyala's core platform. Continuously improving and re-engineering the platform architecture to handle our rapidly growing traffic. Designing and implementing clean APIs and protocols for other teams to build features on top of. Troubleshooting and resolving critical issues with the platform. Guiding and supporting product engineering teams in making full use of the platforms and tools the team provides

Chef, Ruby, AWS, MetaCloud, Consul, Data Dog, Haproxy, Squid, Jira

### Symantec

**June 2014 to March 2015** | Mountain View California

Mobile Security Customer Response Team: Investigate and resolve customer issues with Symantec's Mobility Manager server (Mobile security). Held online meetings with customers to help them resolve difficult issues. Designed and implemented a "HotFix" process for quick delivery of code fixes or patches to customers. Developed "Analog", an application log analysis tool. Created a SymExchange space for CRT support

Python, Django, PyCharm, SVN, Vagrant, AWS, Monit, celery, Rabitt MQ, messaging.

### PayPal

**November 2006 to May 2014**

Infrastructure Team: Developed infrastructure for and drove pilot program for the Internet Security team, based on IBM's AppScan. Developed infrastructure for testing messaging infrastructure, called AMQ.

Stage Reliability Tiger Team: Hand picked for Stage Reliability tiger team, to tackle: "the most critical" issue affecting productivity at PayPal. Designed and developed a monitoring tool called "Argus". Which monitors PayPal Services, restarts them and sends metrics data to a backend DB for reporting and analysis.

Deployment Infrastructure: Design and developed command line interface client/driver for PayPal's Dispatcher. A Deployment System, built on top of Puppet.

FinProd: Developed for the high visibility integration of Bill me latter to the PayPal website.

FinSys: Project managed and developed code for several large scale, credit card payment processing projects: FDMS integration, AMEX, and Airlines

C++, Java, Perl, Python, Ruby, Bash, AppScan (IBM), Jenkins, Jaws, Maven, github, RH Linux,   
REST API, Oracle DB, Django, Puppet,SOAP, clear case, RH Linux. Project Management.

### E\*trade February 2006 to November 2006

Developed projects E\*trade advisors. These were Tuxedo services (server code), which interact with internal web pages.

C++, Tuxedo, Java, Perl & SQL, Linux.

### Kabira

**August 2005 to February 2006**

Developed code for Kabira's clients.

Kabira’s proprietary language C++, Solaris Unix.

### MCI (Now Verizon Business)

**1996 to 2004**

Developed code for Registry, MCI's messaging (middleware) infrastructure. A mission critical framework which performed complex messaging, and message transformation for some 200 applications. Registry interconnected application across multiple hardware and OS platforms. Managed a cross business unit team of testers to plan and execute end-to-end testing.

C++, IBM's Unix (AIX), HP's Unix, Solaris, MVS, Windows and many others. Web-sphere, MQ series,  
Java Servlets, Insure++, xdbc.

### EDM / Candle Corporation (Now part of IBM)

**1991 to 1996**

Selected for the initial and pioneering team in Mexico to develop Candle's Mainframe monitoring and automation tools. Project manager for AF/Operator and AF/Performer automation tools, the largest team in Mexico with 9 engineers reporting to me.

Candle's proprietary languages, C++, Rexx, assembler. Project Management.

## Education

### U.A.C.J. 1984 - 1990

B.S. degree in computer engineering, fully accredited in the United States.

### Colorado Technical University 1998 & 1999

C++ and Object Oriented certifications.