

Zachary N Moffitt

New York, NY

email: zmoffitt@gmail.com

PROFESSIONAL EXPERIENCE

JETBLUE AIRWAYS CORPORATION, New York, NY

Senior Infrastructure Architect, Nov 2017 – present

Reporting to the Director of Infrastructure and Vice President of IT Technology & Integrations, I lead all Cloud-based initiatives for both the IT department and Business ventures which require a Cloud-first or hybrid deployment. It is my responsibility to have a comprehensive understanding of new and emerging technologies and advise the short term and long-term strategy.

- Lead Architect and Cloud Engineer on a team of 30+ across the US and offshore responsible for the discovery of Microsoft Azure's services, movement from IaaS to PaaS model, and rollout of Azure services to be used as Production Cloud services with complete infrastructure-as-code framework and full automation.
- Responsible for all Azure environments and single point-of-contact for cost management of an approximately \$3.2 million commitment after securing more than \$2 million in additional funding from previous year (2017).
- Advised Senior Leadership of various Cloud technologies and strategies after completing a three-month discovery phase to deep dive into the planned fiscal year projects and 3-Year roadmap. This was followed by two months of negotiations with Microsoft for our Azure Enterprise Agreement; which includes significant service discounts for nearly all offerings.
- Successfully designed Azure deployment strategy for IT CAB (Change Advisory Board) approval that includes a similar on-premises environment deployment: Development, QA, User Acceptance/Staging, and Production.
- Automated deployments via ARM (Azure Resource Manager) & Terraform template scripts to train Platform Engineering and Crew Technology Support teams for production rollouts and support runbooks.
- Advised several startups belonging to JTV (JetBlue Technology Ventures) on a cloud-first strategy to provide robust services back to JetBlue and other customers.

COLUMBIA BUSINESS SCHOOL, New York, NY

Associate Director – Infrastructure Services, Dec 2016 – Nov 2017

Reporting directly to the Director of Infrastructure Services and Associate Dean of Technology (CIO), I shared the responsibility with the Director in the daily responsibility for the support of the school's network, physical and virtual infrastructure, and management of the Infrastructure Services team.

- Project lead and manager for fiscal year 16-17 project of Virtual Desktop Infrastructure (VDI) technology discovery and vetted several hyper-converged platforms running VMware Horizon, Citrix XenDesktop, and Microsoft Multipoint servers utilizing SAN storage from EMC (Isilon and VNX) and VMware vSAN technologies with an executive summary and financial analysis report for Senior Management with 3- and 5-Year cost-of-ownership (COO) and return on investment (ROI) reports.
- Managed several projects with a capital expenditure of more than \$200k for FY16-17.
- Successfully developed and deployed a Disaster Recovery (DR) scenario leveraging systems running in Microsoft Azure and on-premises BIG-IP LTM and University-managed GTM solutions.
- Developed DevOps strategy for Application Development and Infrastructure Services teams utilizing GitLab and Continuous Integration (CI) for automated application builds and cross-platform testing.
- Architectural and technical lead for Virtual Infrastructure management, hosting more than 300+ VMs, successfully planned the migration of all hosts to a 10Gbps backbone with 80Gbps+ of cumulative network throughput with no user outage or downtime reported.
- Implemented several cloud-based authentication systems with existing on-premises Active Directory.
- Redesigned system architecture for Drupal 6/7/8 websites that leverages multiple layers of caching mechanisms and cross-datacenter network redundancy supporting multiple system failures.
- Developed proof-of-concept for cross-site data center connectivity network storage using building dark fiber for iSCSI and FCoE virtual infrastructure rollouts as well as EMC VNX MirrorView LUNs.

Systems Analyst – Infrastructure Services, Oct 2011 – Dec 2016

Lead Systems Analyst for Infrastructure Services team and successfully executed IT initiatives each year focusing on implementing new technologies and developing workflows while increasing system performance, system stability, and client support efficiency. High-level 3rd tier support for complex issues within homegrown applications at the Business School and 3rd party applications.

- Managed several IT Department-sponsored projects each fiscal year with budgets exceeding \$50k per project per year focusing on new technology discovery and implementation strategy for the School.
- Lead system architect and engineer for School-wide Enterprise Imaging workflows, utilizing Microsoft System Center Configuration Manager (SCCM) and JAMF Casper, and functional manager for the internal IT applications development and portfolio management teams.
- Developed application lifecycle process and go-live (rollout) workflow that utilizes development, staging, and production environments and was the only process validated by the University's internal audit committee to meet their requirements and specifications.
- Technical lead for Office 365 migration from Exchange 2010 on-premises solution and successfully migrated more than 4000 user mailboxes to Office 365 infrastructure in less than two (2) months.
- Designed and programmed in-house DHCP management system, administering ISC dhcpd service, with advanced PHP and MySQL functionality that handles network configuration of 3000+ clients daily. Portions of this code have been publicly released to contribute to open source community.
- Primary engineer for Puppet and Chef service management modules – supporting 300+ systems.
- Lead technical contact for Business School Marketing Communications team and External Relations team to build and deploy a custom digital asset management system for more than 1,000,000+ assets including photos, articles, and archives over the past century.
- Designed and built a proof-of-concept Research Server and Database Cluster for the Real Estate Research Division at Columbia Business School to analyze professors and researchers needs to properly organize and analyze more than 3TB of research data and automate monthly data imports.

Technical Specialist – Academic Technology Group, Aug 2009 – Oct 2011

Served as the primary contact for resolving the computing needs of students and secondary support for staff and faculty. Researched and resolved computer-issues and wrote documentation for other support teams. Routine analysis, testing, and deployment of new technology and support documentation post-deployment.

- Redesigned and automated deployment for all student Windows and Mac public-kiosks; improved performance and coordinated school wide maintenance for student facing equipment.
- Built student operating system images with required student software and configured for mass distribution.
- Technology group representative on a student-led committee making school-wide IT decisions.

OMNIGUARD SERVICES, LLC., New York, NY

Lead Systems Engineer, May 2007 – July 2009

- Lead engineer for database development, developed custom UI and increased system performance.
- Budgeted capital expenditures and cost management for IT exceeding \$250,000 each year.
- Integrated LDAP/Open Directory system for global user document backup and file preservation as well as global administrator access of all corporate machines.

EDUCATION

COLUMBIA UNIVERSITY, New York, NY

Bachelor of Arts – Computer Science, Software Systems – October 2017

COLUMBIA UNIVERSITY, New York, NY

Bachelor of Arts – German Literature and Cultural History – October 2017

TECHNICAL SKILLS

Applications and Software

4th Dimension

Atlassian Suite:

Confluence, Jira

Adobe:

- Coldfusion Server
- Creative Suite Apps
- Flash Server

Apache:

- Apache Tomcat
- Apache Hadoop

Citrix:

- XenDesktop
- XenServer

Couchbase

Drupal 6/7/8

DRBD

Microsoft:

- Active Directory
- Exchange 2003-2016
- IIS 6/7/8
- Hyper-V
- SCCM and SCOM
- SQL Server 2008-2016
- Threat Management Gateway
- Windows Server Update Service (WSUS)

MySQL:

- RDBMS (Community and Enterprise)
- MySQL Cluster (NDB)
- MySQL Workbench

Nagios

Oracle: JRE, JDK

RedHat:

- Enterprise Linux
- JBoss
- RHN and RHSM

PuppetLabs

SaltStack

Shibboleth

VMware:

- Data Center Virtualization and Cloud Infrastructure
- Fusion
- VMware Cloud Foundation
- vCenter
- vSphere Enterprise
- vSphere Hypervisor
- Workstation

Varnish

Wordpress

Zenoss

Cloud IaaS/PaaS/SaaS

Amazon Web Services:

- Advanced Networking
- CloudFront & Edge Distribution
- DynamoDB & Redshift
- EC2, EFS, S3
- Elasticsearch Service
- SQS/SNS/SES

Microsoft Azure:

- Azure AD/DNS
- Azure ASE (App Service Env.)
- Azure ASP (App Service Plans)
- Azure Function & Web Apps
- Azure Kubernetes Service (AKS)
- Application Insights
- Azure Log Analytics & OMS
- Cosmos DB (SQL & Graph API)
- Databricks/HDInsight

Microsoft Azure (cont.):

- ExpressRoute (Dynamic BGP) with private, public, and Microsoft peering configuration
- Storage Accounts
- Service Bus, Event Hub, and other messaging services
- VMs and VM Scale Sets

Google Compute Engine

PingOne Ping Identity

Service Now

Hardware

Buffalo TerraStation

Dell:

- End-user devices
- Rackmount servers
- Hyper-converged infrastructure (M1000e & FX2)

Drobo

EMC:

- Avamar
- Celerra
- Isilon
- VNX

IBM:

- BladeCenter
- TS4500

Synology

Networking

Aruba:

- Airwave
- APPRF
- VisualRF

Barracuda WAF

Brocade:

- Fiber-Channel (16Gb)
- PoE Switches

Cisco:

- ASA
- IOS, XR, NX-OS

F5:

- LTM & GTM

Office 365 PSTN/VoIP

OpenVPN

Operating Systems

Linux:

- Android
- CentOS/Fedora
- Oracle & RedHat
- Debian/Ubuntu

Mac OS X

Microsoft:

- Embedded & IoT
- Server Family (2003-2016/Core & Desktop Exper.)
- Workstation Family (7, 8.1, 10)

Programming Languages

- .NET
- AngularJS
- AppleScript
- ASP
- Bash
- C, C++, C#
- Git
- Go
- HTML5
- Java
- jQuery
- Ocaml
- Perl
- PHP
- PowerShell
- Prolog
- Python
- R
- Ruby
- SAML/OATH
- Scala
- PySpark