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PROFILE

Resourceful, dynamic professional with broad range of experience across information technology and large scale programs. Highly skilled in strategic planning, application & integration design patterns, development, testing, release management, and operations. Strong leader and motivator who excels in teaching, training and empowering employees. Demonstrated strengths in project resource planning & management, distributed computing, product development, and problem & issue resolution. Proven track record of success in creative, effective and distributed application design across multiple lines of business. Flexible, adaptable, results driven and committed to quality process and product.

SUMMARY

- Enrolled into Barclay's iLead program, fast tracking to a Managing Director role.
- Managed an \$11M annual budget for Barclay's global platform and frameworks.
- Two-time recipient of PayPal's Critical Talent Award.
- Designed and implemented scalable, resilient payment solutions across multiple compliance zones.
- Led ~150 engineers through a quality and engineering excellence discipline effort for PayPal's Global Credit Expansion.
- Chief Architect for ERCOT's \$646M Nodal program.
- Technical representative of ERCOT for the [NIST SmartGrid](#) effort.
- Patent pending for "Framework to process Financial Reference Data".

EXPERIENCE

PayPal | Austin, TX | Sept 2017 - Present

Senior Member of Technical Staff

Auth-Rate: Improved the authorization rates of credit card transactions by several percentage points.

- Generated \$33M of added revenue in 2018; on track toward \$1.1B incremental revenue by 2021.
- The percentage improvement in authorization rates resulted in partners directing more traffic to PayPal.
- Managed the team doing solution design and development to integrate with [Mastercard's ABU](#), [American Express' CardRefresher](#) and [Visa's VAU](#) solutions.
- Managed the team doing solution design and development to obtain ad-hoc updates from issuers such as Chase, Wells Fargo and Discover.
- Managed the team doing solution design and development to expand the offering to internal tenants (Braintree) and external parties.
- Leveraged [CQRS](#) and [Event Sourcing](#) to improve performance from 30M records a month to 30M records in 9 hours, or +2B per month.
- Patent pending for "Framework to process Financial Reference Data".

Barclaycard | Wilmington, DE | Sept 2016 - Sept 2017

Executive Director of Operations and Technology

- Reported to the CTO as the ranking member of the team of 35.
- Managed an international team of 7.

CardNG: A transformation of the existing credit card application platform to a [CQRS](#), Event driven platform based on [Domain Driven Design](#).

- Managed an \$11M budget and a staff of 125 people.
- Acted as technical product owner role for the application platform.
- Drove the alignment of infrastructure solutions across regions.
- Drove the alignment of devops solutions and practices across regions.
- Aligned engineering by products; forming durable teams.
 - Leveraged Domain Driven Design to define strategy.
 - Formed a Community of Practice for federated domain architects to collaborate and align solutions and practices.
 - Initiated a standard of practice for sharing internal APIs.

Cockpit: Updating the German mobile application from read-only to interactive.

- Aligned delivery solution with the expectations of the German COO/CIO.
- Segregated APIs and implementations by domains to isolate release cycles and parallelize delivery.

Technology Domains: Worked at a Barclays group level to establish architectural patterns for both kappa and lambda

architectures.

- Lead the effort for all Barclays business units as a member of the Group Technology Council.
- Established a Community of Practice spanning the Investment, Retail and Merchant Banks.
- Defined architectural patterns and documented evolution paths to the target state architectures.
- Mapped existing projects and funding to the domain to align concentrated funding for future evolution.

PayPal | Austin, TX | June 2011 - Sept 2016

Senior Technical Lead of Architecture

Account Updater: Replatformed a 6-year-old batch system to an event driven system.

- Improved performance from 6M records to 30M w projected capacity of 100M.
- Engineered a diff report to enable running the legacy & new solution parallel for transition.
- Created a multi-tenant messaging interface to allow for de-dupe logic between tenants.
- Designed and developed a multi-partner platform to scale vendors for this and sibling projects.

Commercial Entity: Replatformed a 5-year-old system that aggregates PayPal's total payment volume, subdivided by merchant. Qualifying merchants then have a greater compliance burden to continue taking payments.

- Transactions are fed into Elasticsearch from Settlements and watchers are used to roll up data daily.
- A shallow data set is moved into Oracle in which a REST API is built over to enable merchant management.
- Replatformed the issuer integration using the design and existing components from Account Updater.

Stand-In: Created PayPal's enterprise wide Stand-In ability complete w real-time transaction processing and stateful, scheduled transaction replay.

- Leveraged UML to stabilize the requirements between product and engineering.
- Prototyped the entire solution in NodeJS to validate the integration patterns.
- Delivered a REST based component for real-time processing, a JMS messaging solution for replaying, a Kafka based transaction journal and a Kraken based admin UI.
- Load tested to 210 TPS at 90ms response time per 8 CPU/32 GB node. Leveraged Executors over LMAX.

Global Credit Expansion: An effort to expand the PayPal credit offering across all supported regions; initially US, UK, DE followed by FR, IT, ES.

- **System Monitoring:** Full technical monitoring with distributed tracing and log aggregation.
 - Architected all aspects of system and component metrics, interactions and alerting.
 - Prototyped the entire solution in NodeJS to validate the integration patterns.
- **Credit 2.0:** An effort to redesign the PayPal credit frameworks, domain model and partner integrations.
 - Prototyped COBOL integration with a new partner.
 - Early adopter of the latest Java service framework and helped to finalize their product.
 - This effort focused on AU first followed by US (rewrite), FR, IT, SP.

Digital Wallet: An effort to re-platform and redesign PayPal's consumer facing Web presence.

- **Domain Framework:** A services based bridge pattern.
 - Architected a framework, which isolates Web service changes from existing applications.
- **Progressive Rendering (APEX):** A framework which uses multiple threads to process a request.
 - Designed and implemented two different server side patterns to compare effectiveness.
 - Leveraged JSP tags so there was little impact to the existing application.

Installments - Brazil: A re-platforming effort for installment payments use cases.

- Drove product and business owners to clarify the requirements and focus the delivery goals in order to move the project forward.
- Created a UML portfolio for the project to ensure product and development had the same understanding.

Bonanza: The design and development of PayPal's banking & bill pay experience.

- The lead architect for all consumer facing applications and 3rd party service integration.
- Leading the collaboration to establish an internal taxonomy for a new business domain.

Victoria's Secret: Late requirement due to contract update; requirements to deployment in 6 weeks.

- Ramped up a new Product Owner on process while driving the implementation team forward.
- Quickly triaged issues as they arose in order to unblock the delivery of the solution.
- The solution was designed, implemented and delivered in 6 weeks with no post deployment issues.

SoftBank: A stabilization effort VIP partner's integration operations.

- Executed in depth design and code reviews to ensure a high level of quality in solutions that effect SoftBank.
- Collaborated to design a partner centric test simulator to run against future deployments.

Russia roll-out: The full introduction of the PayPal experience for Russia.

- Lead architect (end-to-end) for the project.
- Created a system wide view of the project covering each domain's facet.

PayPal Lite: A lightweight experience for APAC.

- Collaborated with architects across the organization to deliver PayPal Lite under tight time-lines.
- Managed the technical aspects through consistent collaboration and feedback with the implementation team.

Engineering Excellence: Vertical Solutions requires the highest level of engineering craftsmanship in its role working across PayPal domains to deliver targeted solutions.

- Assessed the talent pool, developed goals, created curriculum and drove implementation of the program.
- Worked across teams, time zones, and cultures to motivate engineers to up their game.

Bar Raiser - Austin Site Lead: An initiative to ensure only high quality candidates join our organization.

- Grew the membership to include departments across the organization.
- Co-designed a post-interview round, which proctored two coding exercises intended to elaborate the candidate's real world coding experience.

Dell | Round Rock, TX | Dec 2010 - June 2011

Software Engineer III

Virtual Integrated Services: A datacenter management appliance which simplifies managing physical and virtual servers as well as the associated storage and networking configurations.

- Managed a team of 7 developers and 2 testers as a Scrum Master.
- Designed Cloud Computing (PaaS and IaaS) services for simplified operating system, server, storage and networking datacenter management.
- Led the effort to document the application platform and establish standards.
- Led the elaboration and subsequent refactoring of 3rd party integrations.

ERCOT | Taylor, TX | May 2004 - Dec 2010

Senior Enterprise Architect

Daily Duties

- Created standards, guidelines and position papers to ensure consistency among projects.
- Created models such as: Capability Maturity Model, Domain Model, Information Flows and Deployment Diagrams
- Participated in the ISO/RTO Technical Council's (ITC) Architecture Working Group (AWG) to ensure IT compliance with NERC standards and regulations.

Texas Nodal Transition: Assumed the Nodal Enterprise Architect role, which is responsible for the technical design and delivery for the \$646M Nodal program.

- Responsible for 14 business systems comprised of 236 individual applications.
- Provided technical advice and guidance to senior management.
- Managed a team of 8 technical architects.
- Developed and implemented a process used to drive technical/integration issues to resolution.
- Identity and Access Management
 - Architected and provided implementation guidance for the replacement of the identity management system and the upgrade of access management infrastructure.
 - Led the creation of use cases for the system.
 - Ensured regulatory compliance by incorporating specific features to support audits.
- Cloud Computing and SOA
 - Initiated efforts and assisted in directing the corporate goal of Software as a Service (SaaS) model.
 - Assisted preparing the market for Web services as the architect for the API working group.
 - Established the guiding principles that determined and drove the design of services.
 - Created a Web service sandbox for the market, which demonstrated Nodal Web services.
- Market Information System
 - Architected and provided implementation guidance throughout the duration of the project.
 - Facilitated and drove the technical design of the portal, policy management and security model.
 - Led the design of real time dashboards and the supporting systems which provide the data.
- Current Day Reporting
 - Facilitated and drove the technical design of the reporting framework.
 - Integrated the business process for tracking reports into the framework for creating the report.
- Market Manager UI and Outage Scheduler UI
 - Architected ERCOT's first UIs that are backed only by Web services.
 - Facilitated and drove the design of each UI and their interaction with the integration layer.

Capacity Planning: Oversaw efforts that support 8 production, 2 test, and 4 development environments. Increased server count from 300 to over 1,200.

- Oversaw virtualization adoption for non-production environments.
- Consolidated applications across all servers, based upon utilization, compatibility, security, and SLA.
- Assisted in redefining the hardware provisioning and decommission processes.
- Participated in the requirements gathering, design, and programming of 2 new 10,000 sqft. datacenters.

Lead Architect in the NIST SmartGrid effort

- A member of the NIST SGIP.
- A member of the IEEE P2030 TF2; assisting the modeling subgroup with 61850 integration.
- Assisted in creating use cases for PAP03 & PAP07 to be submitted to NIST via the IRC.

Process Modeling and Implementation

- Implemented a Knowledge Base for departments to share information and reusable code libraries.
- Created an application and surrounding processes to track the lifecycle of products and present graphical roadmaps for selected products.
- Created an application and surrounding processes to allow the Asset Management team to control desktop software assets and provisioning.

Software Development Life Cycle: Initiated efforts to continually improve development processes, security and reliability.

- Authored Web Presence and Service Approach strategy guide.
- Implemented a Build Orchestration tool for consistent migrations and reduced deployment times.
- Created a peer code review process for each language.

The Grendel Group | Taylor, TX | Nov 2003 - April 2004

Contractor to ERCOT

- Redesigned and expanded the functionality of the ERCOT Retail UI to be in line with standard Web presence.

Vegas.com | Las Vegas, NV | Mar 2003 - Nov 2003

Software Engineer

- Java developer on a team of 5 supporting 6 web applications.

EMC Mortgage Corporation | Irving, TX | Mar 2002 - Mar 2003

Programmer III

- Lead Java developer on the Web Access to Imaged Documents application, which resulted in \$220K annual savings.

TRX Technology Services | Dallas, TX | Nov 2000 - Oct 2001

Software Engineer

- Lead Java Developer on a suite of meeting hosting and management applications.

AllGood Media | Dallas, TX | May 2000 - Oct 2000

Java Developer

- Lead Java developer for a wizard style website creation tool.

Pegasus Solutions | Dallas, TX | June 1999 - April 2000

Programmer Analyst I

- Developed Y2K updates to a JavaScript application that 3rd parties used to support their content on Pegasus' servers.

EDUCATION

Sam Houston State University | Huntsville, TX | 1996-99

Bachelor of Science in Computer Science; minor in General Business.

Certifications

- Sun Certified Programmer for Java 2 by Sun
- Mastering Software Analysis by IBM
- Essentials of Rational Unified Process by IBM
- Application Security Training by Security Compass
- BW611 - TIBCO Business Works 5.x Integration Boot Camp
- BW621 - TIBCO Business Works 5.x Enterprise Solutions Boot Camp
- EMS301 - TIBCO Enterprise Message Service 4.x Administration
- SiteMinder 5.0 Administration
- [Dale Carnegie](#) - Human Relationships and Effective Communication